

MEMBER AUDIT BUREAU OF CIRCULATIONS

The Australasian Journal of Pharmacy

REGISTERED AT THE G.P.O., MELBOURNE, FOR TRANSMISSION BY POST AS A NEWSPAPER

THE OFFICIAL FEDERAL JOURNAL of the ASSOCIATED PHARMACEUTICAL ORGANISATIONS of AUSTRALIA

OFFICIAL JOURNAL OF THE PHARMACEUTICAL SOCIETY OF NEW ZEALAND

New Series: Vol. 36—No. 432

December 30, 1955

Old Series: Vol. LXX—No. 840

*Display this sign to identify
your pharmacy with the famous*

**KODAK
PHOTO-FINISHING
SERVICE**



Kodak national advertising is directing your customers to "Leave your films where you see this sign" . . . so, be sure your sign is prominently displayed to identify your pharmacy with the famous Kodak Photo-Finishing Service.

Photo-finishing profits are CLEAR profits . . . at no stock outlay to you

Kodak (AUSTRALASIA) PTY. LTD.
BRANCHES IN ALL STATES.

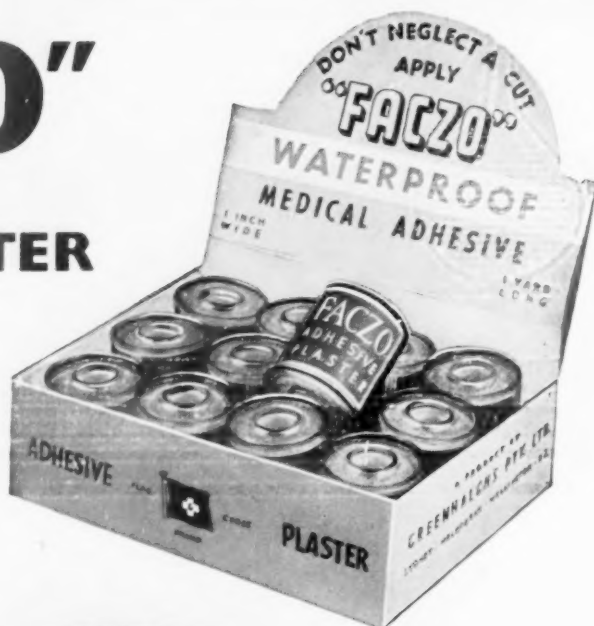
"FACZO"

PLAIN AND WATERPROOF

ADHESIVE PLASTER

now packed in modern hygienic plastic spools
These Plastic spools will be an added attraction to your customers and will build up your sales. In addition, the spools are packed in nice colourful cartons for your window or counter display.

PACKED READY TO DISPLAY: Each spool contains "Faczo" Adhesive Plaster, 1 in. or ½ in. x 1 yard long, and is packed in dozen lots in these handy display cartons to save you time.



WATCH YOUR SALES RISE
WHEN YOU SELL

"FACZO"

MEDICATED ADHESIVE PLASTERS

Faczo Zinc Oxide adhesive plasters, in plain and waterproof quality, hygienically packed in their own exclusive container of Australian registered design—simple to handle and affording fullest protection to the plaster.



Faczo Brand Zinc Oxide Plaster is procurable in Standard Association sizes:—
1 in. x 2½ yards : 1 in. x 5 yards
2 in. x 5 yards : 3 in. x 5 yards

Manufactured by

GREENHALGH'S PTY. LTD. 9 Phillip St., Sydney

Branches: Commerce House, Melbourne, Vic.

54 Victoria St., Wellington, N.Z.

The Australasian Journal of Pharmacy

With which is incorporated
"The Chemist and Druggist and Pharmacist of Australasia."

Published on the 30th of each month by
The Australasian Pharmaceutical Publishing Co. Ltd.
Registered Office, 18-22 Saint Francis Street, Melbourne.
Telephones: FJ 5161 (Editorial) and FB 3774 (Advertising and Accounts).
Subscription: Within British Empire, £2 p.a.; other addresses, £2/10/-.
Single Copies: Within Australia, 3/6; overseas, 4/6.

BOARD OF DIRECTORS:

H. A. Braithwaite (Chairman).
H. F. Clarke.
R. I. Cohen.
Walter C. Cottrell.
R. S. F. Greig.
K. H. Jenkins.
J. L. Townley.

BOARDS OF MANAGEMENT:

New Zealand:

H. F. Clarke, Wellington.
F. W. J. Johnson, Otahanga.
C. N. Bell, Green Island.
Eric Dash, Christchurch.

Victoria:

H. A. Braithwaite.
N. C. Cassar.
Eric Scott.

New South Wales:

H. D. B. Cox.
L. W. Smith.
J. L. Townley.

Queensland:

R. S. F. Greig.
C. W. Noble.
H. G. E. Sneyd.

South Australia:

Walter C. Cottrell.
D. Finlayson.
K. S. Porter.

Western Australia:

R. I. Cohen.
G. M. Dallimore.
F. W. Avenell.

Tasmania:

J. M. Goid.
P. T. Holmes.
H. H. Jenkins.

EDITORIAL:

Editor:

F. C. KENT, B.Com.

Manager and Associate Editor:

T. G. ALLEN, Dip. Com.,
A.A.S.A., L.S.W.

Science Section Edited by:

A. T. S. Sissons, B.Sc.,
F.I.C., F.P.S.

CONTENTS

DECEMBER, 1955

	Page
● Editorial	1397
● The Month	1398
● Science Section	1400
● Applied Pharmaceutics	1411
● Prescription Proprietaries and New Drugs	1412
● Nicholas Institute for Medical and Veterinary Research	1413
● Pharmacology for Pharmacy (Article No. 10)	1418
● Guild Obtains Travelling Scholarships Grant (Pfeiffer Foundation)	1415 and 1419
● The System of District Pharmacies in Sweden	1422
● Proprietary Medicines—A Survey	1426
● Every Pharmacist can be his own Press Agent	1438
● The Women's Section	1440
● Overseas News	1443
● Publications Received	1446
● Trade Notes	1448
● News and Reports—	
Commonwealth	1451
Western Australia	1452
Tasmania	1455
New South Wales	1459
Victoria	1479
Queensland	1491
South Australia	1500

ADVERTISEMENT REPRESENTATIVES:

THE AUSTRALIAN TRADE PRESS AGENCY (Mr. R. Everett), 130 Crawford Street, London, W.1.
JOHN B. DILLON, 3 Lombard Street, Glebe Point, Sydney. (Phone: MW 1815.)
G. V. BOYD, G.P.O. Box 2538, Melbourne (Phone: MB 2963.)

OFFICIAL ANNOUNCEMENTS

PHARMACY BOARD OF VICTORIA

ANNUAL REGISTRATION FEE

Pharmaceutical chemists whose names appear on the Pharmaceutical Register of Victoria are reminded that the annual registration fee to renew registration for 1956 is payable at the office of the Board no later than December 31, 1955.

Persons whose original registration was effected during 1955 are not required to pay a registration renewal fee.

The Board requests that all others who wish their names to be retained on the Register should forward the renewal fee of £1/1/- as early as possible in December.

F. C. KENT,
Registrar.

360 Swanston Street,
Melbourne, C.I.

PHARMACY QUALIFYING EXAMINATION

The next Qualifying Examination will commence at the University of Sydney on Thursday, February 2, 1956.

TIME TABLE

Pharmaceutics I	Thursday, February 2, Morning.
Pharmaceutical Arithmetic	Thursday, February 2, Afternoon.
Pharmaceutics II	Friday, February 3, Morning.
Prescription Reading & Posology	Friday, February 3, Afternoon.

Practical Work commences on Monday, February 6.

Entry forms are available from the Board only. Fee for part or whole of the examination is £3/3/-. Applications close with the last post on December 30, 1955. Watch this column for further announcements.

P. E. COSGRAVE,
Registrar.

Fifth Floor,
Winchcombe House,
52 Bridge Street, Sydney.

INDEX TO ADVERTISERS

	Page		Page
Abbott Laboratories Pty. Ltd.	1477	Greenison Pty. Ltd.	1483
Allen & Hanbury (A'asia) Ltd.	1481	Gregory Steel Products Pty. Ltd.	26
Amalgamated Dental Co.	19	Hallam Laboratories Pty. Ltd.	1475
Amalgamated Insurance Ltd.	2	Hanimex Pty. Ltd.	15
Amolin Laboratories	1463	Hare & Co. Pty. Ltd.	1435
Andrews Laboratories	1499	James	1435
Anglo-Swiss Drug Co. Pty. Ltd.	1476	Heinz Co. Pty. Ltd.	1466
Arden & Co. (Instruments) Ltd., H. B.	17	Howards of Ilford Ltd.	1420
Arnold & Co. Pty. Ltd., G.	26	Imperial Chemical Industries of A. & N.Z. Ltd.	1431
Arnold Bros.	1483	Johnson & Johnson Pty. Ltd.	1458-1493
Australian Cream Tartar Co. Pty. Ltd.	1467	Joubert & Joubert Pty. Ltd.	18
Australian Glass Mfrs. Co. Pty. Ltd.	25	Kodak (A'asia) Pty. Ltd. Cover 1	
Avery (Aust.) Pty. Ltd., W. and T.	1464	Lawrence & Co. Ltd., Alfd.	1439
Ayrton, Saunders & Co. Ltd.	5	Levenson Scale Co. Pty. Ltd.	25
Barker & Son Ltd., Robert	25	Manesty Machines Ltd.	17
Bayer Pharma Pty. Ltd.	1453	May & Baker (Aust.) Pty. Ltd.	1497
Beckers Pty. Ltd.	1490	McDonald Pty. Ltd., Charles	1469
Blau (Aust.) Pty. Ltd., R.	1470	Melbex Pty. Ltd.	11
Bleakley Photographics Pty. Ltd.	23	Menley & James (Aust.) Ltd.	1428
Boots Pure Drug Co. (Aust.) Pty. Ltd.	1485	Merck (North America) Inc.	1424
Boston Shopfittings Pty. Ltd.	1486	Monsanto Chemicals (Aust.) Ltd.	1427
Brannan & Sons Ltd., S.	18	Muir & Neil Pty. Ltd.	Supplement iii
Bray & Holliday Pty. Ltd.	1473	Nicholas Pty. Ltd.	14
British Drug Houses (Aust.) Pty. Ltd., The	9	Official Announcements	2-3
British Medical Laboratories Pty. Ltd.	1482	Organon Laboratories Ltd.	1457
Buckley & Co. Pty. Ltd., H. H.	1498	Ortho Pharmaceutical Co.	1474
Burfit, D.	1467	Parke, Davis & Co.	Cover 3
Burroughs Ltd.	16	Peace & Co. Pty. Ltd., Wm.	1486
Burroughs, Wellcome & Co. (Aust.) Ltd.	Cover 4	Pfeiffer Travelling Scholarship	1419
Calmie Ltd.	1480	Pharmaceutical Defence Ltd.	1484
Chartres Ltd.	1496	Photimport Pty. Ltd.	1442
Chemists' Account Service	1476	Plastic Price Ticket and Beading Co.	23
Chemists' Account Service Pty. Ltd.	1487	Potter & Birks Pty. Ltd.	1501
Chesebrough-Pond's Inc.	1450	Provana Laboratories	1472
Classified Advertisements	1421	Pro-Vita Products Pty. Ltd.	1488
Coates & Cooper Ltd.	20	Ransom & Son Ltd., Wm.	1423
Colgate-Palmolive Pty. Ltd.	1472-1495	Reckitt & Colman (Aust.) Ltd.	6
Commonwealth Drug Co.	21	Rendell Ltd., W. J.	22
Commonwealth Serum Laboratories	1505	Riker Laboratories Ltd.	13
Crown White Coats Pty. Ltd.	1456	Rocke, Tompsett & Co. Ltd.	1454
David G. Bull Laboratory	1494	Rotary Tableting Corporation Pty. Ltd.	1445
Delany & Co., William	3	Royce (Aust.) Pty. Ltd.	1504
De Vanta Chemical Co.	26	Schering Pty. Ltd.	1462
D.H.A. (N.S.W.) Pty. Ltd.	Supplement ii-1494	Scott & Bowne (A'asia) Ltd.	12-1503
D.H.A. (Q'ld) Pty. Ltd.	4	Searle & Co. Ltd., G. D.	7
Dormay Co.	1498	Shell Co. of Aust. Ltd.	1449
Dunlop Rubber Aust. Ltd.	8	Sigma Company Limited	Supplement 1-1441-1484
Edinburgh Laboratories (Aust.) Pty. Ltd.	10	Sleigh Ltd., H. C.	1502
Evans Medical Australia (Pty.) Ltd.	1489	Stearns & Co., F.	1409
Faulding & Co. Ltd., F. H.	1436-1490	Studley Trading Co. Pty. Ltd.	1487
Fenby Pty. Ltd.	1492	Toppin & Sons Pty. Ltd., R. D.	1461
Florance, E. H.	1492	U-Tex Manufacturing Co.	24
G.P. Pty. Ltd.	1460	Warner-Lambert Pty. Ltd.	1432
Glaxo Laboratories (Aust.) Pty. Ltd.	Supplement iv	Waterworth, E. N.	1465
Glenn Pty. Ltd., L. & L.	1478	Wholesale Drug Co. Ltd.	1468
Greenhalgh's Pty. Ltd.	Cover 2, 21	Witzig & Co. Pty. Ltd., P.	1475
		Wyeth International Ltd. (Inc. in U.S.A.)	1465
		York Co. Pty. Ltd., H.	1502
		Zeal Ltd., G. H.	19

Pharmacy Board of Victoria

ANNUAL ELECTION 1956

Whereas TWO VACANCIES on the Board will be created in the month of February, 1956, caused by the retirement through effluxion of time of HENRY ALFRED BRAITHWAITE and WILLIAM WISHART, notice is hereby given that I will on the 6th day of February, 1956, proceed to hold an ELECTION of TWO fit and proper persons to serve as members on such Board. Candidates for election must be nominated on or before the 16th day of January, 1956, and if there be more persons nominated than there are vacancies, a POLL will be taken on the 6th day of February, 1956. Such nominations will be received at the offices of the Pharmacy Board, 360 Swanston Street, Melbourne, up to 4 o'clock in the afternoon of the 16th day of January, 1956.

Dated the 14th day of December, 1955.

J. I. RICHARDS,
Returning Officer.

Pharmaceutical Society of Victoria

ANNUAL ELECTION 1956

In pursuance of the provisions contained in the Articles of Association of the above Society, it is hereby notified that an ELECTION will be held to fill FOUR ORDINARY VACANCIES on the Council and to elect an AUDITOR on the 5th day of March, 1956. The retiring members of the Council are PAULINE AGNES CRAWFORD, FREDERICK WILLIAM JOHNSON, CHARLES PENROSE ACTESON TAYLOR and IVAN JAMES THOMPSON, and the retiring Auditor is ROBERT HAYDON MORRISON. Monday, the 13th day of February, 1956, has been appointed as the day of nomination. Nomination papers of candidates must be lodged, or delivered by post, at the office of the Society, 360 Swanston Street, Melbourne, before 4 o'clock in the afternoon of the day fixed for nomination. In the event of more candidates being nominated than there are vacancies, a POLL will be taken on the 5th day of March, 1956.

J. I. RICHARDS,
Returning Officer.

Melbourne, December 9, 1955.

MELBOURNE FIRE OFFICE LTD.

400 Collins St., Melbourne.
49 St. George's Terrace, Perth.

SYDNEY FIRE OFFICE LTD.

9-11 Hunter St., Sydney.

ADELAIDE FIRE OFFICE

126 King William St., Adelaide (Merged in The London and Lancashire Insurance Co. Limited).

BRISBANE FIRE OFFICE

Creek St., Brisbane (Merged in The London and Lancashire Insurance Co. Limited).

ALL P.D.L. Chemists' Indemnity Insurance is written by these Offices

Fire, Plate Glass, Workers' Compensation, Burglary, Personal Accident, Motor Car (Comprehensive and Third Party Act), Public Risk (Premises and Bicycle Delivery). Insurances Effected at Lowest Rates.

The above Group of Offices constitute:—

AMALGAMATED INSURANCE (Australia) LIMITED

Registered Office:

400 Collins Street, Melbourne

Directors: E. W. Braithwaite (P.D.L.), H. D. B. Cox (P.D.L.), F. W. Cornell, and Sir George Wales (Chairman).



Telephones: BX 5601-2-3

WILLIAM DELANY & COY.

WHOLESALE DRUGGISTS, CHEMISTS' SUNDRYMEN

30-32 MARKET STREET, SYDNEY

Importers, Indentors, Distributors
of

Fine Chemicals, Chemists' Sundries, Patent Medicines,
Toilet and Perfumery Preparations of Leading Makers.

Agency with stocks A.B. Tonic Wine

ENQUIRIES SOLICITED



for Fun under the Sun...
ELIMINATE REFLECTED GLARE

with

SUNGARD

BRITAIN'S BEST SUNGLASSES!



SMART

LIGHT

ELEGANT

COMFORTABLE

RESTFUL

LONG-LASTING



A wide variety of styles now available for immediate delivery.

CROOKES
LENS

World-famous Crookes English Lenses are fitted to all "Sungard" SUNGLASSES.

Every component, from the finely ground Crookes lenses right down to the small nuts securing the frames is of the highest quality—making "SUNGARD" SUNGLASSES a product you will be proud to display—and sell!

Distributed throughout Australia by

ALL **D.H.A.** HOUSES

"REDEX" DRIVER PRAISES "SUNGARD" GLASSES

D. H. (Peter) Antill says in his letter of appreciation, "It was very surprising to find just how much greater road detail is revealed when these glasses were worn when dust or fog is encountered."





asthma...

KNOWS NO FRONTIERS

and is not confined to one season.



Sufferers from **ASTHMA, BRONCHITIS** and **HAYFEVER** need **TABASAN'S** safe, speedy relief all the year round.

You can safely recommend

TABASAN

FOR ASTHMA

from the following agents

J. McGLOIN PTY. LTD., 310 Flinders Lane, MELBOURNE. Phone: MU 3467.
 J. McGLOIN PTY. LTD., 38 Hutchinson Street, Surry Hills, SYDNEY.
 Phone: FA 1154.
 J. McGLOIN PTY. LTD., Worando Building, 89 Grenfell Street, ADELAIDE.
 Phone: W. 3286.
 D. MACLEAN PTY. LTD., Maclean's Building, 119-121 Charlotte Street, BRISBANE.
 W. J. CLAYDEN & CARPENTER LTD., MacIaren's Building, 144 William
 Street, PERTH.

MADE BY *Ayrtons* OF LIVERPOOL ENGLAND

The Premier House for Packed Pharmaceuticals

CODIS

A marked improvement upon TAB. CODEIN. Co. B.P.

Aspirin, phenacetin, codeine phosphate; there is no more familiar group of analgesic drugs. 'Codis' improves upon it. In Codis the "aspirin" is soluble, as in 'Disprin', and rapidly forms a solution of palatable calcium aspirin.

A Codis tablet placed uncrushed in water provides, in a few seconds, a solution of calcium aspirin and codeine phosphate, with phenacetin in fine suspension.

The advantages of analgesic therapy with Codis are, rapid disintegration of the tablet in water with resulting greater ease of administration, and far less likelihood of intolerance by the patient. The chance of gastric irritation is minimised because there are no undissolved particles of aspirin.



COMPOSITION

Each Codis tablet contains:— Acid Acetylsalicyl. B.P. 4 grs., Phenacet. B.P. 4 grs., Codein. Phosph. B.P. 0.125 grs., Calc. Carb. B.P. 1.2 grs., Acid. Cit. B.P. (Exsic) 0.4 grs., Excip ad. 11.45 grs.

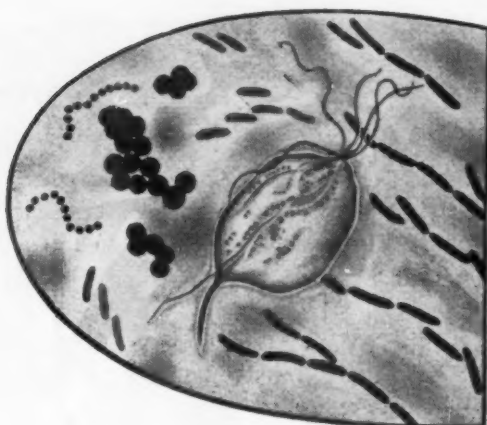
DISPENSING PACKS

Prescription box of 100 tablets in 10 distinctive gold foils of 10 tablets each.

OTHER SIZES 16 tablets in 4 distinctive gold foils.

SOLD ONLY BY CHEMISTS

REGEITT AND COLMAN (AUSTRALIA) LTD. (PHARMACEUTICAL DIVISION) SYDNEY



*The complete
restorative treatment
of
Vaginal Infections*

"Floraquin" provides the complete restorative treatment of vaginal infections by combining scientifically the potent protozoacide, Diodoquin,* with lactose, dextrose and boric acid. Thus by the use of "Floraquin" the vagina is acidified to the desired pH of between 3.8 and 4.4, all offending organisms are destroyed, and a favourable environment is provided for the growth of the normal protective Döderlein bacilli.

SEARLE

Floraquin^{*}
**TABLETS
& POWDER**

*brand of
di-iodohydroxyquinoline
compound*

SEARLE

** Diodoquin (Searle) is a non-toxic, insoluble, highly protozoacidal di-iodide of hydroxyquinoline.*

Note New Address:

G. D. SEARLE & CO., LTD.
83, Crawford Street
London, W.1

The "Floraquin" treatment consists in inserting two moistened "Floraquin" tablets high into the vault of the vagina night and morning, supplemented by insufflation with "Floraquin" powder two or three times weekly. Treatment is continued through the menses. "Floraquin" is available as powder in 1 oz. bottles (2.15 gm. Diodoquin* per ounce) and as tablets in boxes of 24 and bottles of 400 (dispensing pack), each tablet containing 100 mg. Diodoquin.*

Literature on request

*REGISTERED TRADE MARK

Sole distributors for Australia:
Nicholas Proprietary Ltd.,
37 Swanston Street, Melbourne, C.I.



with a Dunlop Flooring that says *come Again!*

Because no one flooring can meet every need, Dunlop produce several types . . . each with its own distinctive qualities. Your choice depends on the effect you wish to create, how much you wish to spend and the type of subfloor over which the installation is to be made.

Whether your business is lingerie or light manufacturing . . . footwear or food . . . bring your flooring problems

to us. Our experts are at your service . . . to assist in the selection of flooring, colour and pattern . . . and to supply a complete installation service.

A Dunlop Flooring can be installed with a minimum of interruption to business . . . and once down is ready for years of service in keeping maintenance costs down—and customer appeal up.

**VINYL TILES—SEMASTIC TILES—RUBBER FLOORING
& RUBBER TILES—LINK MATS—STAIR TREADS—
FLEXIMERS—LINOLEUM & LINO TILES.**

FOR A COMPLETE FLOORING SERVICE, CONTACT—

MELBOURNE: Dunlop Flooring Service,
130 Flinders Street, Phone MF 0371.

SYDNEY: Dunlop Rubber Australia Limited,
27-33 Wentworth Avenue. Phone B 0969.

ADELAIDE: The Dunlop Flooring Centre,
131-133 Pirie Street. Phone W 1641.

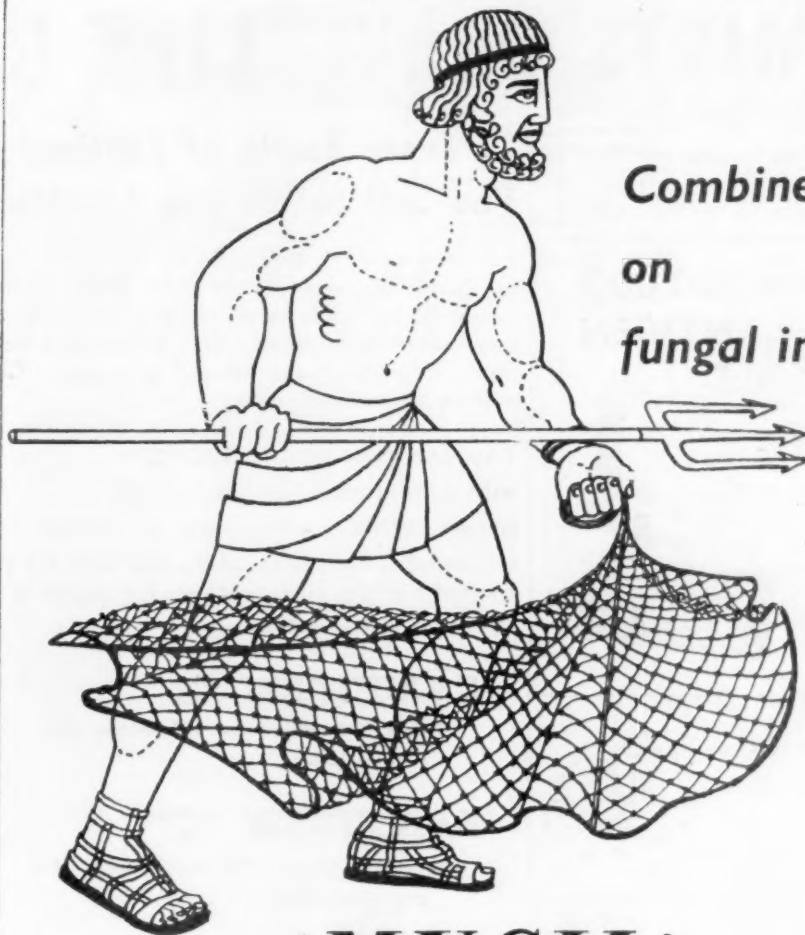
BRISBANE: Dunlop Rubber Australia Limited,
Cantenary Place. Phone FA 0271.

LAUNCESTON: 18 Paterson Street. Phone 1650.

PERTH: Dunlop Rubber Australia Limited,
424 Murray Street. Phone SA 8141.

HOBART: Dunlop Rubber Australia Limited,
27 Argyle Street. Phone B 6581.





**Combined attack
on
fungal infections**

'MYCIL'

The combined use of Mycil Ointment and Mycil Dusting Powder provides effective *non-mercurial* treatment for tinea and other fungal infections of the skin.

Mycil Ointment penetrates deeply to the site of infection.

Mycil Dusting Powder protects against re-infection after clinical cure has been effected and is a useful agent with which to combat excessive perspiration.

**Ointment in collapsible
metal tubes 2/8.**

**Dusting powder in sprink-
ler tins 2/8.**

Pessaries — tube of 12, 5/6.

*Prices in Australia to the medical
profession.*

THE BRITISH DRUG HOUSES (AUSTRALIA, PTY.) LTD. 250 PITT STREET, SYDNEY, N.S.W.

LONDON • TORONTO • BOMBAY • JOHANNESBURG • AUCKLAND

MYC/AUS/42

FOR 20 YEARS A PROFITABLE "CHEMISTS ONLY" LINE!

The Lantigen series of Oral Vaccines were first marketed just on 20 years ago. Since then their sale has spread from Australia across the world.

**MORE THAN 4,000,000
BOTTLES OF LANTIGEN
HAVE BEEN SOLD**

Each Lantigen has proved successful in use because it is a specific treatment for the disorders it is designed to relieve.



Favourable Reports on Oral Vaccines . . .

In the introduction to an important review of the available literature about oral vaccines, Dr. David Thomson, O.B.E., M.B., Ch.B., D.P.H., Director of the Pickett-Thomson Research Laboratory in London, and his co-workers say that, after having reviewed all the available literature about the use of oral vaccines, they are convinced that immunity can be obtained with vaccines administered by the oral route.



*Every Bottle of Lantigen
You Sell Brings You 7/- Clear*

Dr. Cronin Lowe reports in the British Medical Journal as follows: "In my experience, the oral antigens (oral vaccines) have been mostly employed in cases of catarrhal infections, rheumatic conditions and catarrhal enterocolitis. Clinical response has been quite definitely marked."

You can recommend Lantigen with confidence because of its known merits and know that when you make a sale you are selling not only one of the most useful but one of the most profitable products you are in a position to offer.

LANTIGEN "B"

Catarrh, Bronchitis, Sinus, and Antrum infections and colds.

LANTIGEN "C"

Rheumatism, Neuritis, Fibrositis, Lumbago of a germ borne origin.

LANTIGEN "E"

Hay Fever and Asthma.

Lantigen

**INTERSTATE
REPRESENTATIVES**

Victoria: Edinburgh Laboratories Pty. Ltd., Askew House, Lonsdale Street, Melbourne. Queensland: Edinburgh Laboratories, 99-101 Edward Street, Brisbane. Western Australia: Clayden & Carpenter Pty. Ltd., 144 William Street, Perth. South Australia: Edinburgh Laboratories (Australia) Pty. Limited, Naval Memorial House, 23-25 Peel Street, Adelaide. Tasmania: Edinburgh Laboratories Pty. Ltd., Askew House, Lonsdale Street, Melbourne.

N.Z. REPRESENTATIVES: Fluenzol Pty. Ltd., Thorndon Quay, Wellington.

ORAL VACCINES

Product of Edinburgh Laboratories
(Australia) Pty. Limited,
103 York Street, Sydney.



MELBREX
PTY. LTD.

TOMORROW'S

Sunglasses
... TODAY!

1. Cleopatra 49/6



STRIKING

Yellow, Red, Green and Black Stripes—White Black Stripes—Red, White, Red and Gold Stripes/Black, Black Stripes/Yellow.

3. Twin Florida 39/6



ATTRACTIVE

Black—White, Black—Red, Red/White, Red/Black, White/Black, White/Red.

5. Men's Polo 37/6



MASCULINE

Honey Amber, Black, Wine.

7. Laminated Plaza 27/3



DAINTY

Royal Tinsel, Pink Silver, Sky Blue Silver, Royal Silver, Red Silver, Green Silver, Black Gold.

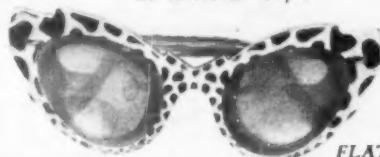
STYLES for ALL...

•• THE FASHION CONSCIOUS WOMAN

•• THE MODEST TYPE

•• THE CONSERVATIVE MAN

2. Riviera 49/6



FLATTERING

4. Dualtone Florida 34/6

Yellow, Red, Green and Black Spots/White Gold Spots/Black, Red Black Spots/Yellow.



MODEST

Frost Blue, Sea Blue, Tangerine, Claret Red, Moss Green, Briar Brown, Wine, Black, White.

6. Men's Duke 19/6



SPORTY

Black and Clear

8. Veneered Venus 27/3



DRESSY

Sky Blue, Cadet Blue, Blue, Sienna, Coral, Black/Blue, Black/Pink.

- SUNGLASSES OF DISTINCTION
- UNSURPASSED QUALITY
- MODERATE PRICES
- PROMPT SERVICE AND REPAIRS

MADE IN AUSTRALIA DISTRIBUTED BY

MELBREX PTY. LTD.

41-43 WESTON ST., BRUNSWICK, MELBOURNE N10
TELEPHONES: FW 6238 & FW 6239

AGENTS IN ALL STATES:

ALL PRICES ARE TO THE PUBLIC—INC. SALES TAX
REGISTERED DESIGNS

EXTENSIVE TESTS IN TROPICAL AREAS PROVE: **Vykmín's** gold foil packaging is 'climate proof'

(THE SHELF LIFE OF THE PRODUCT GUARANTEED
EVEN IN HIGH SUMMER EXTREMES OF HEAT)

Extensive tests were carried out during the 1953/54 summer throughout the hottest parts of Australia and in Malaya, Indonesia, and Indo-China, to determine the most effective way of delivering Vitamins to the Consumer under conditions of extreme heat, without loss of potency or capsule deterioration. Laboratory tests carried out after these storage tests, under tropical and sub-tropical conditions, proved the Vykmín foil pack to be outstanding in its efficiency as compared with every other type of pack tested. The importance of a guaranteed shelf life of a product of

this type cannot be over-emphasised. The Vykmín pack is tropic-proof and has been tropic-tested and all stockists can have complete confidence even at Summer's peak.



Guarantee yourself big profits from the fast-growing
vitamin-product market — promote famous English formula

VYKMIN in counter and window displays

*** FIRST NATIONALLY ADVERTISED
VITAMIN-MINERAL CAPSULES**

VYKMIN Vitamin and Mineral Capsules, a product of SCOTT & BOWNE LTD., London and Sydney, are available through the Pharmaceutical Distributors of Australia. For Sale Through Chemists Only.

PREPARATIONS OF INTERNATIONAL REPUTE

AVAILABLE IN AUSTRALIA

RIKER

RAUWILOID*

brand alkaloid hydrochlorides of *Rauwolfia serpentina*

Rauwolfia in its optimal form and the preparation of choice in essential hypertension, 'Rauwiloid' contains the hypotensive alkaloids reserpine and rescinnamine, as well as other desirable alkaloids, but not those of the yohimbine group, which are rejected in the extraction process. Moreover, 'Rauwiloid' is biologically tested and standardized.

2 mg. tablets in bottles of 20, 60 and 500
DOSE: 2 tablets nightly

RAUWILOID* + VERILOID

'RAUWILOID + VERILOID' is a striking example of drug complementation. It combines in one tablet 1 mg. of 'RAUWILOID' brand alkaloid hydrochlorides of *Rauwolfia serpentina*, and 3 mg. 'VERILOID' brand alkaloids of *Veratrum viride*. 'RAUWILOID,' by widening the margin between the effective therapeutic dose of 'VERILOID' and that producing side actions, enables satisfactory hypotensive doses of 'VERILOID' to be given to most patients. The combination is ideal for relieving the symptoms of moderate to severe hypertension. It is effective, safe, and produces a minimum of discomfort to the patient.

RAUWILOID* + HEXAMETHONIUM

'RAUWILOID' + HEXAMETHONIUM is a combination indicated in the treatment of severe, intractable hypertension. It increases the margin of safety of oral hexamethonium, as the dosage of this drug can be halved in some cases when given in combination with 'RAUWILOID,' thus lessening side-effects. Furthermore, fluctuation of the blood pressure is minimised. Each tablet contains 1 mg. of 'RAUWILOID' brand alkaloid hydrochlorides of *Rauwolfia serpentina* and 250 mg. of hexamethonium chloride dihydrate.

Sole Agents: Medical Research Pty. Limited, P.O. Box 3749, G.P.O., SYDNEY

* 'RAUWILOID' and 'VERILOID' are Registered Trade Marks of

RIKER LABORATORIES LTD. LOUGHBOROUGH LEICS. ENGLAND

LOS ANGELES

TORONTO

PORT ELIZABETH



For damaged skin, including **severe sunburn**
 recommend 'UNGVITA'— an ointment providing the Vitamin 'A' content
 and healing principles of fish liver oil in a bland neutral base,
 and 'UNGVITA' with 'SALACRIN' — contains in addition 1/1000 'Salacrin'
 (brand of Methyl-Aminoacridina A.P.F.) for those cases
 where extra anti-bacterial activity is required . . .

'UNGVITA'

A Nicholas **N** Product

FOR THE TREATMENT OF

burns abrasions
infant rashes

HAS GIVEN GOOD RESULTS IN THE

TREATMENT OF SEVERE **sunburn**

ETHICAL DIVISION, Nicholas Proprietary Limited, 37 Swanston Street, Melbourne. Branches in all States.



A Christmas Greeting

The Directors, members of the Board of Management and Staff of the Journal wish for every reader a Merry Christmas and a Bright, Prosperous and Happy New Year.

They wish also to record their appreciation of the help and service rendered to the Journal by contributors to the various sections, to advertisers, local correspondents, representatives in Australia and overseas, whose interest and co-operation has made possible the task of publication of the Journal month by month.

As we enter our seventy-first year of publication we look forward to a continuance of the interest and help so freely and generously given in the past. We shall strive, also, to maintain the standards set in the past and to provide the pharmaceutical chemists of Australia with a Journal of which they may be proud.

THE MONTH

News of Pharmaceutical Events at Home and Abroad

Hoarding of Heroin in U.K.

Our London correspondent reported late in November that last-minute efforts were being made to get the Government to alter its decision to ban the manufacture of Heroin after December 31, 1955.

The B.M.A. sent a further protest to the Home Secretary, stating: "It is convinced that you have been wrongly advised, and that your decision is an exceedingly unfortunate and regrettable one."

"The Times" newspaper reports that one hospital, which administers not less than 20,000 doses of heroin a year, has purchased enough to provide for seven years ahead.

Medical opinion in the U.K. on the need for heroin is divided.

The Ministers' Advisory Committee said there is a suitable alternative.

"The Times," on the other hand, states that staffs of some of the best-known hospitals in Britain are satisfied that no heroin substitute exists specifically for the quietening of pain in patients with cancer of the bone, the most agonising pain human beings can experience; for the safe alleviation of some coughs that accompany lung growths; for easing certain inflammation of the windpipe, and a number of other conditions.

There is, however, a feeling that the tactics and the strategy of the controversy are not the whole of the matter, but that the Government's decision breaches a fundamental professional principle, thus confirming a theory that doctors have had since they were "nationalised."

At a meeting of the Fellowship of Freedom in Medicine, held in London, at which more than 100 doctors were present, it was stated by one that the number of addicts of heroin would greatly increase, and many pain-wracked patients would "go through hell" if the ban was imposed. The meeting unanimously passed the following resolution:—"Believing that heroin is of the greatest value in the treatment of some medical conditions, and that the ban on its manufacture would serve no useful purpose, the meeting strongly urges the Home Secretary to reverse his decision."

Drug Resistance to Antibiotics

In view of recent reports of the development of an extremely resistant strain of bacteria which has caused the death of several children in New Zealand, it is interesting to consider the present status of anti-

biotics with respect to the development of resistance to them by bacteria.

A resistant bacteria is one which requires more antibiotic than most other strains of the same species to prevent its growth. The phenomenon is not confined to the antibiotics, but was first introduced 40 years ago with the use of organo-metallic compounds in the treatment of certain tropical diseases. The phenomenon reappeared when the sulphonamides were introduced, and the organism which could become easily resistant was the gonococcus. However, from the clinical point of view the phenomena the most serious were the antibiotics.

In the case of penicillin only the staphylococcus developed resistance to penicillin. About half the staphylococci isolated in hospital practice are now resistant to therapeutic levels of the drugs. The ease with which the tubercle bacillus becomes resistant to streptomycin is far more serious. The condition is, however, mitigated by the use of para-amino-salicylic acid and other tubercle bacilicostats.

Resistance, as studied in vitro, appears to be of two types. One is relatively slow and of limited degree, and may result from minor adjustment to a changed substrate. It is perhaps an adaptation rather than a profound change in the nature of the cytoplasm. The other may be dramatically sudden and profound, and seems to result either from overgrowth of a naturally high resistant variant present in the organic culture or from a chance mutation. Only the first type with limited resistance is usually observed in vitro with penicillin, but when resistance is observed clinically with staphylococcus it is usually of the second type, and may be a thousandfold in degree.

It would appear that mutations in bacteria are more common than in other forms of life. How and why these mutations occur is unknown, but is the subject of intensive study at the present time. We do know that the increased resistance may be accompanied by penicillinase production, the enzyme which destroys penicillin. Probably also the cell synthesizes different amino acids, the building blocks of proteins, because it is through preventing the complete anabolism of protein that penicillin exerts its destructive effect on micro-organisms.

How serious is the problem of resistance with respect to penicillin? Such almost complete resistance as that described in the reports is rare. However, the problem is too common to be ignored. On the other hand, undue alarm has been proclaimed. The problem

of resistance is less serious now than it was some years ago, because organisms do not become resistant to all antibiotics. In the serious cases under consideration the organism yielded to erithromycin. It has been said that the indiscriminate use of antibiotics leads to resistance. This is, of course, true, but not at any one moment has anybody suggested that the use of antibiotics should cease, and those who have said that other uses should be limited have not produced any evidence to show that, if other uses were restricted to half or a quarter of the present level, the problem of resistance would be affected to the same degree. When one decries the indiscriminate use of antibiotics one has to weigh the alleviation of minor distress of a large degree against the possibility of a few deaths. The possibility of those deaths becomes less and less as the new antibiotics multiply.—F.H.S.

"CANDY MEDICATION"

Accidental Poisoning of Children

A committee on toxicology, formed by the Council on Pharmacy and Chemistry of the American Medical Association, to study the health problems of household chemical products, has produced a report on "Candy Medication and Accidental Poisoning" (J. Amer. Med. Ass., 1955, 158, 44). Although pleasant medication in the form of sweets is a relatively recent development, and, according to the report, it is now used (in America) for antibiotics, antiepileptics, antihistaminics, barbiturates, sulphonamides, salicylates and vitamins. These take the form of heart-shaped sweets, lollipops, chewing-gum, rock, fruit-flavoured syrups and dispersible chocolate or orange-flavoured granules for adding to milk or breakfast cereal.

The report enumerates the dangers attendant on such forms of medication: illness and deaths in children have been caused by over-indulgence in potent medicines disguised in the form of sweets; inaccurate dosage may result from palatable liquid forms of medication. Although statistics on morbidity and mortality are not sufficiently detailed to indicate the full influence of this form of medication, it is known that, in the under-five age group, five times as many deaths from aspirin were reported in 1951 as in average pre-war years, i.e., before the general distribution of a flavoured form of children's aspirin.

Points put forward by physicians in favour of "candy medicines" are that taste itself does not appear to be the responsible factor in all cases of accidental poisoning in children, and that the frequency of accidents is caused by drugs being left within the reach of children. They refer to the difficulties of giving non-flavoured medicines to ill or irritable children, resulting perhaps in the child being sick and possibly aspirating vomitus. Its proponents believe that the benefits of sweetened medication outweigh any increased risk of accidental poisoning.

The report concludes that the predisposing factors underlying most cases of accidental poisoning are ignorance, carelessness and ready access to a harmful drug. Measures proposed to reduce these factors include precautionary labelling, safety containers and restrictive legislation. There is marked evidence of apathy by consumers to such admonitions as "Keep out of the reach of children." Safety devices, states the report, must be inexpensive. Restrictive legislation, although of value in establishing a minimum standard of conformance for products usually has little direct

influence on consumer practices. Carelessness is often caused by advertisements which imply a degree of safety not associated with the drug, and recognition of this cultivated ignorance on the part of the user would, it is considered, be a major step toward improving the safe use of common household medicaments.—"The Pharmaceutical Journal," June 4, 1955.

FIRST AID IS A YEAR-AROUND AFFAIR

Many pharmacists believe that after prescriptions the most important and profitable department in the drug store should be, and can be, the First Aid Department. The products involved are demand items and appeal to a ready market. Every home has a medicine chest at least partially prepared to take care of emergencies, and it is the duty of the pharmacist who wishes to play his acknowledged health role to make sure that the chest is continually and comprehensively stocked with fresh merchandise.

Here is one way you might do this. Check over your stock, and from it make up a check-list, in alphabetical order, of all those items which you feel should be kept on hand in every home. Have the list printed or mimeographed, with some such heading as "YOUR MEDICINE CHEST NEEDS ALL THESE," and distribute it freely . . . as a handbill, in a mailing, when wrapping a prescription, or purchase of any kind. In this manner you can help to educate the public of its basic needs, and strengthen your store's continuing role as a public health centre.

You may want to plan a First Aid Window, showing the wide range of items you carry, with appropriate illustrations. Your centre card might carry a message like this:

IN YOUR HOME . . . IN YOUR CAR . . . IN YOUR
COTTAGE—YOU NEED FIRST AID
EQUIPMENT.

Your window might be divided into three sections to carry out this theme. For the cottage, besides the actual first aid kit, you might include clinical thermometers, sterilised gauze, extra gauze bandages and adhesive plaster, rubbing alcohol or liniment, aromatic spirits of ammonia, bicarbonate of soda, sunburn ointment, milk of magnesia, oil of cloves, chloride of lime, and water purifiers.

Here are some other merchandising suggestions for promoting your First Aid Department. To ensure that the customer who calls for a prescription has the first aid items required for its use, mark the prescription blank when the prescription is compounded. Then whoever is on duty when the customer calls is reminded by the marking to suggest the item or items.

Related item selling to the first aid products buyers is also profitable. Always ask, "What is the trouble? What are you going to use it for?"

The adhesive purchaser may possibly be going to use it to tape his car window. But if he says he wants it for a cut, then you know at once that he needs more than adhesive. He also needs the correct size sterile gauze squares, as well as cotton and alcohol for cleansing the wound.

Sometimes, too, the customer doesn't really need what he asks for. Instead of adhesive, for instance, he may possibly need an elastic bandage or ankle brace.

Be sure, finally, that your First Aid Department is in a suitable location, where you can promote it, not just once a year, during First Aid Week, but regularly and continually the calendar round. One of the best spots is close to the prescription and baby departments. This emphasizes the department's professional aspect—something which cannot be stressed by the non-drug competition.

SCIENCE SECTION



EDITED BY A. T. S. SISSONS, B.Sc. F.P.S.

THE 1955 ADDENDUM TO THE B.P.

A Review by K. R. Capper, B.Pharm., Ph.D., F.P.S., D.I.C.

(Reprinted from The Pharmaceutical Journal, October 8, 1955)

The publication of an addendum should not be received with any less interest than the publication of a new edition of the Pharmacopoeia. Page for page an addendum is likely to have even more significance, as it should contain only material which is urgent and important. This is borne out by an examination of the contents of earlier books. Most of the sulphonamides, antihistaminic drugs, pure vitamins and a great many other important members of our modern materia medica first received official recognition in an addendum; as did the first monographs for compressed tablets and for preparations of human blood, the first application of modern statistical methods to official biological assays, the first official description of "Sterilisation by Heating with a Bactericide," and of the Karl Fischer method for determining water. A complete list of everything of importance which has made its debut in the addenda of the Pharmacopoeia would be as impressive as it would be tedious to compile and to read.

The new Addendum does not fall short of this high level of significance. The publication of monographs for the insulin suspensions, a new formulae for the tinctures and syrups of lemon and orange, a more detailed description of the test for pyrogens and its application to large-volume intravenous injections, a new disintegration test for tablets, and the substitution of Distilled Water by Purified Water are examples of what has been done.

New Monographs

The table below gives most of the new monographs, but in addition to these are monographs for tablets containing drugs which have had pharmacopoeial status for some time, namely, amphetamine sulphate, carbarson, di-iodohydroxyquinoline, hyoscine hydrobromide, morphine sulphate, pentobarbitone sodium, and quinine sulphate. A monograph for Soluble Aspirin Tablets based on the formula which first appeared in the National Formulary 1952 provides a standard for these tablets at a time when the recent paper by Muir and Cossar ("Brit. Med. J.," 1955, 2, 7) may persuade some doctors to avoid prescribing the traditional type of aspirin tablet. As shown in the table, the new mono-

ARTICLES

- The 1955 Addendum to the B.P.
- Reserpine and *Alstonia Constricta*
- The Tars
- The Measurements of Liquids
- A Rapid Method for the Determination of Phenacetin in the Presence of Acetylsalicylic Acid, Caffeine and Codeine
- Recent Progress with Chemotherapeutic Agents
- Pethidine: Dangers of Addiction
- Addiction to Alcohol
- *Rauwolfia* in India
- Rubber Closures for Injectable Solutions
- Preparation of Aminophylline Tablets
- Senna as a Laxative
- Artificial Arteries
- Active Fields in Soil Microbiology
- The Binding of Cardiac Glycosides with Serum Proteins
- On the Possible Existence of a Cardio-Tonic Principle in the Liver
- The Pharmacology of an Alkaloid from *Himantandra Baccata*

graphs range over most of those fields of therapeutics in which clinical research is particularly active. Many of these drugs have previously been described in the British Pharmaceutical Codex and the standards in the Addendum in many instances resemble closely those in the Codex, but experience which has been obtained since the Codex committees prepared the B.P.C. standards has enabled the Commission to amend some of the tests and assays, to omit some requirements and to add others.

Type of Drug	Type of Monograph	Preparations Included
Analgescic	*Phenylbutazone	
Anthelmintic (for filariasis)	†Diethylcarbamazine Citrate	Tablets
Antibiotic	Oxytetracycline Dihydrate	Tablets
	Oxytetracycline Hydrochloride	
Anticoagulant	Dextran Sulphate	Injection
	*Phenindione	Tablets
Anticonvulsant	Primidone	Tablets
Antimalarial	*Chloroquine Phosphate	Tablets
	*Chloroquine Sulphate	Tablets
Antithyroid	*Carbimazole	Tablets
Antitubercular	*Isoniazid	Tablets
Diagnostic	*Iopanoic Acid	Replaces Mersalyl in the injection
Diuretic	Mersalyl Acid	
Ganglion-blocking Agent	*Hexamethonium Tartrate	Injection
Haematinic	*Ferrous Gluconate	Tablets
Hormones	Corticotrophin	Tablets
	*Cortisone Acetate	Injection
	Insulin Zinc Suspension	Tablets
	Ditto (Amorphous)	
	Ditto (Crystalline)	
Local Anaesthetic	*Lignocaine Hydrochloride	Injection with Adrenaline
Morphine antagonist	*Nalorphine Hydrobromide	Injection
Muscle relaxant	†Gallamine Triethiodide	Injection
	*Suxamethonium Chloride	Injection
Stimulant and Analeptic	†Methylamphetamine Hydrochloride	Tablets

* Introduced in B.P.C. 1954. † Introduced in B.P.C. Supplement, 1952. ‡ Introduced in B.P.C., 1949.

Amendments

Changes in formulae and in storage recommendations are those most likely to affect the majority of pharmacists. The Addendum contains a number of such changes. The replacement of Distilled Water by Purified Water is a matter of some historic and practical interest. Purified Water can be prepared by dis-

tillation or by treatment with ion-exchange materials. The latter method may enable pharmacists to prepare their own purified water, but precautions are needed to ensure that the column of ion-exchange resin functions properly, and that micro-organisms are not growing on it and yielding nitrogenous organic material to the water. The Addendum requires that Purified Water shall not only comply with the specifications in the B.P. for Distilled Water, but also shall have a pH within the range 4.5 to 7.0, and comply with a limit test for albuminoid ammonia. The latter requirement is based on the recommendation of Saunders ("J. Pharm. Pharmacol," 1954, 6, 1014). Whether it will be practicable for pharmacists to prepare Purified Water in the dispensary will depend on the availability of facilities for frequent or continuous checks on the quality of the water being delivered and for efficient and economic maintenance. Tap water, especially in some areas, is by no means a satisfactory vehicle for all mixtures. If Purified Water can be used in these without disturbing unduly the drug bill, it will enable products to be pharmaceutically elegant whatever the type of prescription.

The quantity of Syrup of Lemon prescribed was undoubtedly always much less than the amount dispensed one way and another. The amounts prescribed and dispensed are both likely to be much less than formerly, as it appears in no N.F. mixture, and the taste of the graduate trainee is probably more sophisticated than that of the apprentice of earlier years. The storage of this highly fermentable syrup will be therefore even more of a problem than it was in the past. The formula in the Addendum enables small batches to be prepared from a now stronger Tincture of Lemon by adding citric acid and syrup. The strength of Tincture of Orange has also been increased and the formula of the Syrup of Orange suitably modified. It was a convenience to be able to prepare Syrup of Orange by diluting 60 minims of the tincture to one fluid ounce with syrup. The days of the apothecaries' system of weights and measures may be numbered, but most mixtures are still dispensed in that system. It would have been an understandable act on the part of the Commission to have formulated the two syrups using 62.5 mls of tincture per 1000 mls (30 minims per fluid ounce) instead of 60 mls as has been done.

Calamine Lotion B.P. 1953 has been severely criticised, but it was a more elegant and satisfactory preparation than that of earlier editions. The tendency to become unpourable and to froth badly was irritating, but as Fenton ("Pharm. J.," 1954, 173, 8) showed, these faults could be overcome by adding a small proportion of sodium citrate, and now 0.5 per cent. of this salt has been included in the B.P. formula. The details for preparing Injection of Mersalvi have been altered, and the injection may be sterilised by the bactericide method, using phenylmercuric nitrate, as well as by the filtration method, formerly the only permitted method.

Storage Requirements

The maintenance of drugs and preparations without significant loss of activity is one of the major duties of pharmacists. It is noteworthy that at least three of the new storage recommendations follow reports of the supply of products which had deteriorated. Tablets of Penicillin are not only to be packed in a suitable well-closed container, which should be stored in a cool, dry place, but the container must be one which prevents access of moisture, for, states the Addendum, "They [i.e., the tablets] deteriorate on exposure to moist air." It should be noted that the directions for packing, a term which includes dispensing, are obligatory. A new requirement for Tablets of Penicillin limits the moisture content to 1 per cent. Tablets of Glyceryl Trinitrate should be kept in a well-closed container, protected from light, and stored in a cool, dry place, the word "dry" having been added to the B.P. 1953 recommendation. Stored under these con-

ditions, the tablets may be expected to retain their potency for at least one year after the date of preparation, and therefore this date must be given on the label or on the wrapper of the package. The statement which permitted these tablets to be made by the procedure for lozenges has been deleted.

The recommendations for storing Capsules of Halibut-liver Oil protected from light in a cool place are not altered, but we are now told that, if so stored, they may be expected to retain their potency for at least three years after the date of preparation, which must be stated on the label or wrapper. The supply of medicines which are deficient in strength is reprehensible, and particularly so when they may be required for a patient who is seriously ill, as in the case of penicillin and glyceryl trinitrate. It may be put forward as an excuse that it was not realised that loss of strength could occur so readily. The B.P. Commission have acted wisely in not only recommending methods to retard loss of the activity of these unstable drugs but also in providing definite information on the period over which they are likely to remain effective if properly stored. It would have been better, however, if the date of preparation had always to be on the label on the container and not alternatively on a wrapper. A wrapper may be thrown away and the container with some of its contents remain on a dispensary shelf or in a cupboard in the patient's home long afterwards. It is now advised that Compound Tablets of Sodium Bicarbonate should be kept in a well-closed container. The paragraphs relating to the several insulin injections have been modified so that, while it is still stated that the product should be kept at as low a temperature as possible above its freezing point, the additional recommendation that it should not be exposed to temperatures exceeding 20° is replaced by a statement that it deteriorates when stored at temperatures approaching 20°.

Other amendments of general interest include the deletion of the statements in the insulin monographs giving the strength to be dispensed or supplied when no strength is stated. Although this may occasionally inconvenience pharmacists, it is undoubtedly safer to make certain what is intended by the prescriber instead of following an arbitrary pharmacopoeial instruction. The addition of the phrase "or prepared by synthesis" to the introductory paragraph in the Atropine monograph recognises a remarkable feat in scientific research and its technical application. The observant reader may also note that official objection to the addition of colour is not all-embracing, as up to 0.001 per cent. of a suitable blue colouring matter may now be added to trichloroethylene.

Assays and Standards

This review has dealt at some length with those matters likely to be of interest to the majority of pharmacists, and little space is left for describing changes made in tests and assays and adjustments in the standards for content of pure substances. These matters are of immediate concern to a relatively small number of pharmacists in specialised work. Nevertheless, the specifications are an important and probably a major part of the Commission's work, and they entail a great deal of careful consideration by various Committees and often extensively experimental work. About 60 amendments of this sort occur in the Addendum, not counting those in interim amendments which were published in 1953 and 1954 and which have been reproduced in the present book. Several biological assays are included in connection with the new monographs, e.g., for oxytetracycline (referred to aureomycin), for corticotrophin (thymus involution and adrenal-ascorbic acid depletion methods) and for dextran sulphate (referred to heparin). As a standard preparation for the assay of Vitamin A is no longer available, the Addendum has added a specification for *all-trans* Vitamin A Acetate.

Two features are worth a rather more extended re-

ference. The first is the transference of the test for pyrogens to an Appendix, where it is described in some detail. In the B.P. 1953 the test appeared in individual monographs, in most of which reference was made to the monograph for Amorphous Penicillin for the limited information given there, whereas now, in all cases, reference is to the Appendix. The pyrogen test is the province of strong-minded and sharp-tongued experts who do not always agree with each other, and into this province only the most foolhardy of the inexpert would venture. At the recent British Pharmaceutical Conference a speaker urged with eloquence the advantages of the sequential type of test, in that instance in relation to the estimation of the weight of tablets. Such an arrangement is applied here, using from one to four groups of three rabbits, according to the results obtained. The promotion of the pyrogen test to Appendix status coincides with its application to five injections usually administered intravenously in large volumes, including the Injections of Dextrose, Sodium Bicarbonate and Sodium Chloride.

The disintegration test for tablets has been criticised because of the difficulty in deciding on the interpretation of the test. The new test depends on the passage of the disintegrated tablets through gauze, complying with the requirements for a No. 10 sieve. The gauze in the form of a disc is fitted at the lower end of a glass or plastic cylinder with an internal diameter of 28 mm. The cylinder is partially immersed in water at $37^{\circ} \pm 2^{\circ}$, and is raised and lowered through a distance of 75 mm. 30 times a minute, the gauze just clearing the surface of the water at the highest point. Five tablets are placed in the tube and should disintegrate sufficiently to pass through the gauze within the specified time, usually 15 minutes. If the tablets fail to pass through, the test is repeated with a further five tablets, using a plastic guided disc weighing about 2 gm., which is placed above the tablets. The maximum disintegration time for sugar-coated cascara sagrada tablets is increased to two hours, a change not likely to worry anybody very much, as cascara is never taken for rapidity of effect.

This summary of the contents of the 1955 Addendum shows that there is much of significance to all pharmacists, whether in retail, hospital or manufacturing pharmacy. An addendum can no more be ignored than the Pharmacopoeia itself, and this is one of the most important addenda issued by the B.P. Commission. Of the quality of the Addendum as a book, no higher praise can be given than to say it is that which we have learnt to expect from Mr. T. C. Denston and his staff.

RESERPINE AND ALSTONIA CONSTRICTA

W. D. Crow
(C.S.I.R.O. Division of Industrial Chemistry)

The last decade has seen a considerable revival of interest in alkaloid chemistry, indeed in natural product chemistry as a whole, but no alkaloid has aroused more

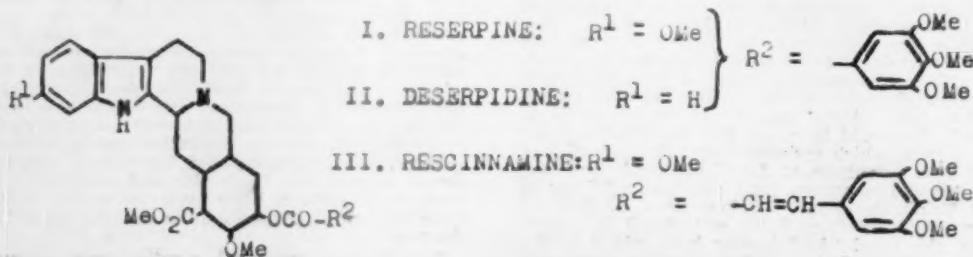
widespread interest than has reserpine¹, the active principle of the Indian drug plant, *Rauwolfia serpentina*. The use of the drug in India for the treatment of insanity and a variety of other ailments is centuries old, and clinical investigations^{1,2} were in progress as early as 1931. Pharmacological testing of the plant was undertaken by a number of Indian workers from 1933 onwards, and perhaps the most significant among the conflicting results published were those of Gupta, Kahali and Dutta³, who showed that the sedative principle occurred in the presumed non-alkaloidal resin fraction of the extracts. In 1952 Müller, Schlittler and Bein⁴ reported the isolation of reserpine from this fraction, and this alkaloid was shown to have the tranquillising and hypotensive effect associated with the whole root. The chemistry and pharmacology of reserpine have been adequately reviewed^{5,6}, and are outside the scope of this article. Commercial exploitation of Indian *R. serpentina* by drug firms followed rapidly, and reserpine, despite its high price, was soon in demand for the treatment of hypertension and mental illness. Simultaneously a spate of publications appeared, emanating mainly from the drug firms of Sandoz and Ciba, describing the isolation of various alkaloids from *R. serpentina*. At this stage it is not possible to say how many alkaloids have actually been isolated, since few of the workers have been able to rigorously identify their products, but there are at least a dozen chemical entities, ajmaline being the major base present. Notable among these alkaloids was rescinnamine (III), isolated by Klotz *et al.*⁷ and possessing similar properties to reserpine.

New Sources of Reserpine

The Indian Government, disturbed by the large and increasing export of *Rauwolfia* roots, banned their export after a time, and this touched off an intensive search for new sources of the alkaloid. Three were soon brought to light: *R. vomitoria*⁸ (Africa), *heterophylla*⁹ (America) and *canescens*¹⁰ (Asia), the first surpassing the original source in reserpine content. Among the alkaloids reported were deserpidine¹¹ (II; canescine, recanescine) from *R. canescens* and alstonine from *R. vomitoria*. *Alstonia constricta*, a small tree confined to Australia, was known¹² as a source of alstonine and was moreover botanically related to *Rauwolfia*. It was decided in these laboratories to study this relationship a little further and examine the genus *Alstonia* for the presence of reserpine or similar alkaloids.

Assay Method

Survey work of this kind requires a reasonably rapid chemical assay for this type of alkaloid in the presence of a largely unknown mixture. Methods similar to that published by Sakal and Merrill¹³, which involve electrophoretic separation of reserpine prior to spectrophotometric estimation, are too involved, and a different approach was adopted. The known reserpine-type alkaloids (I, II, III) differ from their congeners mainly in that on alkaline hydrolysis they produce nonvolatile acids (trimethoxybenzoic or trimethoxycinnamic acid) and an assay process was developed on this basis. Al-



though the assay did not distinguish between the known alkaloids it clearly indicated the presence of this type of alkaloid as a group. While this work was in progress details became available of a similar assay, published independently by Indian workers¹⁴ of the Central Drug Research Institute at Lucknow.

A. constricta root bark showed the presence of 0.25% (calculated as reserpine) bases producing nonvolatile acids in this assay, some results of which are shown below. Preliminary examination of the extract resulted in the isolation¹⁵ of 0.05% pure reserpine, leaving a further 0.2% by assay to be accounted for. Australian drug firms showed interest in this discovery, and the investigation was therefore continued in more detail.

Plant	% "Reserpine"	Plant	% "Reserpine"
<i>R. serpentina</i> (root)	0.15	<i>A. scholaris</i>	Nil
<i>R. vomitoria</i> (root)	0.36	<i>A. muelleriana</i>	Nil
<i>A. constricta</i> (root)	0.25	<i>A. actinophylla</i>	Nil
<i>A. constricta</i> (bark)	0.02	<i>A. brassii</i>	Nil
<i>A. constricta</i> (leaf)	Nil	<i>A. spectabilis</i>	Nil

Possible Commercial Exploitation

The decision was made to examine the problem with three main objects in view:

- (1) The preparation of a reserpine concentrate by simple methods.
- (2) Isolation and estimation of pure reserpine.
- (3) Examination of the other alkaloids.

In that order of priority, since this would of necessity be the order of working up the complex mixture of alkaloids. In the meantime, several Australian firms proceeded to examine the availability of *A. constricta* as a necessary preliminary to considering commercial production.

The production of an alkaloid concentrate in a manner suitable for commercial adaptation did not offer any great difficulty, and a patent has been applied for covering the production of a concentrate which contains up to 65% "reserpine" according to the assay method developed. This concentrate, which contains almost all the alkaloids responsible for the assay figure of 0.25% has been submitted for pharmacological testing, and arrangements have been made for clinical testing to follow this should the reports be satisfactory. Although reserpine could be crystallised directly from this concentrate the yield was disappointing, and only 0.05% (based on root bark) could be obtained. It may therefore be concluded that the higher assay figures are mainly due to other bases containing nonvolatile acid groups. The assay figures for a large number of root samples were fairly constant at 0.25%, but no attempt has been made to assess any variation in actual reserpine content. There is a possibility that the other bases are sufficiently related to reserpine to possess similar physiological properties, and it must be re-

membered that the *Alstonia* concentrate will not necessarily have the same detailed action as that from *Rauwolfia*, although both contain reserpine as one of the active principles. This means that the *Alstonia* concentrate cannot at present be regarded as a substitute for reserpine or *Rauwolfia* concentrates, although its overall action may prove to be similar. Thus any exploitation of *Alstonia constricta* must await the results of pharmacological and clinical research.

Alkaloids of the Reserpine Concentrate

In the normal course of an alkaloid investigation paper chromatography plays a role of paramount importance, in that it is usually the only means by which the chemist can assess his problem and determine the success or failure of the procedures he adopts for separation. Unfortunately, the usual solvents failed completely with the alkaloids of *A. constricta* and it became necessary to select a new system. This was ultimately achieved, and the reserpine concentrate was now shown to contain some eight alkaloids of which four (one of them reserpine) rank as major constituents. Separation of the mixture is not yet complete, but three of the constituents have been isolated. One of the major constituents other than reserpine gave on hydrolysis a crystalline base and an acid not identical with trimethoxybenzoic acid, while a minor constituent m.p. 230° C. (not deserpidine) gave 3:4:5-trimethoxybenzoic acid and an amino-acid. Thus two bases other than reserpine have been isolated which give nonvolatile acids on hydrolysis, partially accounting for the original assay. The structures of these bases are under investigation.

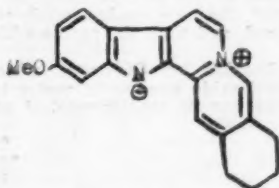
Other Alkaloids

The occurrence of alstonine (ca. 2%) was readily shown, but apart from this the stronger bases have not been examined in detail. Paper chromatography of the weaker bases remaining after removal of the reserpine concentrate showed the presence of at least fifteen alkaloids. In view of the observed instability of alstonine it is possible that some of these are artefacts produced during the extraction, and experiments designed to test this are planned. From the mixture it has been possible to isolate an alkaloid m.p. 184° C. which corresponds to the alstonidine previously isolated from the stem bark by Hesse¹⁶. Further work on these fractions has been temporarily set aside until examination of the reserpine concentrate is more advanced.

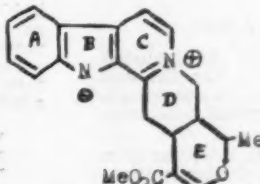
Synthesis of Reserpine

While the search for new sources of reserpine goes on, the problems of synthesis are also receiving attention. The first problem to be overcome was that of steric configuration of the molecule, since there are theoretically 64 stereoisomers of reserpine, by no means all of which could be expected to show similar activity. Recent work^{17,18} has clarified this aspect of the problem, and the synthesis of *dl*-reserpine, the hydrocarbon skeleton of reserpine, from synthetic 11-methoxysempervine (IV) has been published by Huebner¹⁹.

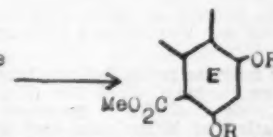
It remains now to place the substituents in ring E in order to accomplish complete synthesis, and this last phase could prove extremely difficult. In this connec-



IV



V



tion it is probably worth noting that alstonine (V), as an internal enol ether is theoretically capable of ring fission (Ring E), modification and ring closure to a type of compound superficially resembling deserpidine. While such a transformation may not be readily achieved, it nevertheless represents a possible avenue for research.

Taking into consideration the difficulties which must be overcome to produce an economically feasible synthesis it seems more likely that reserpine will ultimately be replaced, if at all, by an unrelated synthetic or by one incorporating those features of the molecule necessary for its activity. The natural oestrogenic hormones were replaced in the latter way by hexoestrol derivatives, but in the case of reserpine the problem is more difficult. It has been established that the indole NH is essential, and that the aromatic methoxyl group is unnecessary, but as yet no complete picture of the "essential" parts of the reserpine molecule is available. Without this information the search for a substitute can only be made on a trial-and-error basis. It is possible that the new *Alstonia* alkaloids may shed some light on the problem of structure vs activity in the reserpine field.

Although the synthesis of *dl*-reserpine is a considerable advance, and illustrates the possibility at least of total synthesis, there are still many problems to be solved. Even if synthesis is achieved, replacement of the natural product will depend on economic aspects. Reserpine is currently sold at some 80/- per gm., a price which would encourage synthesis, but in the event of a substantial price fall the synthesis would have to be a cheap one to compete.

It seems clear from medical reports that reserpine or similar type drugs for the treatment of hypertension and mental illness are here to stay for some time at least. Thus the problem of synthesis, though difficult, is a worthwhile one, just as is the search for the drug from natural sources not hitherto examined.

REFERENCES

1. Roy, P. C., *Patna J. Med.*, **4**, 131 (1931).
2. Sen, G. and Bose, K. C., *Ind. Med. World*, **2**, 194 (1931).
3. Gupta, J. C., Kahali, B. S. and Dutta, A. T., *Ind. J. Med. Res.*, **32**, 183 (1944).
4. Müller, H., Schlittler, E. and Bein, S., *Experientia*, **8**, 338 (1952).
5. *Annals N.Y. Acad. Sci.*, **59**, 1-140 (1954).
6. Mukerji, B., *J. Sci. and Ind. Res.*, **14A** (Supplement) (1955).
7. Klohs, M. W., Draper, M. D. and Keller, F., *J. Amer. Chem. Soc.*, **76**, 2843 (1954).
8. Poisson, J. et al., *Compt. rend.*, **238**, 1607 (1954).
9. Djerassi, C. et al., *J. Amer. Chem. Soc.*, **75**, 5446 (1953).
10. Klohs, M. W., et al., *J. Amer. Chem. Soc.*, **76**, 1381 (1954).
11. Schlittler, E. et al., *Experientia*, **11**, 64 (1955).
12. Sharp, T. M., *J. Chem. Soc.*, **1934**, 287 (1934).
13. Sakai, E. H. and Merrill, E. J., *J. Amer. Pharm. Assoc.*, **43**, 709 (1954).
14. Bhattacharji, S. and Dhar, M. M., *J. Sci. and Ind. Res.*, **14B**, 376 (1955).
15. Crow, W. D. and Greet, Yolande M., *Aust. J. Chem.*, **8**, 461 (1955).
16. Henne, O., *Annalen*, **205**, 360 (1890).
17. Van Tamselen, E. E. et al., *J. Amer. Chem. Soc.*, **77**, 3630 (1955).
18. Huebner, C. F. et al., *Experientia*, **11**, 303 (1955); *J. Amer. Chem. Soc.*, **77**, 4180 (1955).
19. Huebner, C. F., *Chem. and Ind.*, **1955**, 1196 (1955).

THE TARS

By C. H. Price, F.P.S., Ph.C., A.R.I.C.

The Tars, under which heading may be included Coal Tar, Wood Tar, Ichthamol, Birch Tar Oil and Oil of Cade, present so many problems in compounding that they are worthy of a little special consideration.

Coal Tar may be prescribed as Crude Coal Tar (Pix Carbonis) or Prepared Coal Tar (Pix Carbonis Praeparata). Crude Coal Tar is prepared by the destructive distillation of bituminous coal at a temperature of about 1000° C. The liquid distillate separates into

two layers, the ammoniacal layer and the lower tarry layer.

The tar is very complex, as shown by the fact that in industry it is resolved into at least five fractions. The light oil, the fraction distilling below 170° C., yields benzene and its homologues; the middle or carbolic oil, coming over between 170° and 230° C., contains phenol, cresols and naphthalene. The heavy oil, range 230°-270° C., contains cresols and their homologues, and the green oil, 270°-400° C., provides anthracene.

The residue left in the still is Pitch, now rarely used in medicine, but still prescribed by the amateur practitioners as Pitch Pills.

Since, in addition to the above, tar contains small quantities of basic substances such as ammonia, pyridine, aniline and quinoline, together with a sulphur compound thiophen, it is little wonder that it presents difficulties in compounding.

The crude tar when heated in a shallow dish at 50° C. loses some of its more volatile substances, such as ammonia, the product being Pix Carbonis Praeparata. The resulting dark brown viscous liquid, which normally has a weight per mil of 1.15, tends to increase in viscosity on keeping and to change in solubility.

Although insoluble in water, coal tar imparts an alkaline reaction to it, a fact which serves to distinguish it from other Tars. Coal Tar also gives a blue colour to petrol ether, in which it is partially soluble; it is also miscible with chloroform, benzene and with volatile oils.

Coal Tar is used in a wide variety of combinations in the treatment of skin conditions. Some physicians prefer to prescribe the crude coal tar, but others, working on the theory that the crude product is too irritant for use, prefer either Prepared Coal Tar or the alcohol soluble fraction of it as Liquor Picis Carbonis.

The original Ung. Picis Carbonis B.P.C.¹ was a 1-16 dilution of Liquor Picis Carb. in yellow soft paraffin, but this formula has disappeared from the '53 edition, presumably in favour of Ung. Calamine Co.

The fact that tar "ages" on keeping does not help in the formulation of ointments. The ageing can to some extent be prevented by storing the tar in collapsible tubes, which also help in the weighing of it.⁴

The difficulty of getting all the tar off the paper on which it is weighed can be avoided by coating the wax paper with a thin layer of soft paraffin or castor oil. The slab upon which the ointment is to be worked can be similarly coated, and dilution of the tar with castor oil seems to give a smoother ointment and avoids the black specks which straightforward admixture with paraff. molle flav. yields.

The colour of tar ointments depends largely upon the order of mixing the ingredients. In the following type:—

R	
Amvum	3ii
Zinci Oxidum	3ii
Pix Carbonis	3iiss
Paraff. Molle Flav.	ad 3iiss

if the zinc oxide be finely powdered and sifted and mixed with the starch, and the tar worked in, followed by the addition of the soft paraffin, the colour is black. If, however, the zinc oxide, starch and soft paraffin are first mixed, and then the tar be added, the product is grey.

Tar mixes with Emulsifying Ointment, which will then take up a considerable amount of water to yield a soft ointment which can be readily washed off:—

R	
Picis Carb.	2%
Paraff. Iiq.	30%
Paraff. Dur.	5%
Cera Emulsif.	8%
Aqua	ad 500 grains

Experiment has shown that the above can be made

satisfactorily if the coal tar is mixed with a little castor oil first and then incorporated with the previously made base. The three semi-solids are melted together, and the water warmed to the same temperature; these two liquid phases are then mixed and triturated until cold. If an electric stirrer is available, the warm water is placed in a beaker and the stirrer set going. The melted paraffins and emulsifying wax are poured into this, and stirring allowed to continue until the product is white and viscous.

The mixture of tar and Ol. Ricini is added and the stirring continued. The product can finally be transferred to a slab and milled with a spatula.

This same ointment can be made satisfactorily if the emulsifying wax is doubled in quantity.*

A comparatively new American base, Delyl Extra,* makes satisfactory ointments. This base is principally isopropyl myristate, and the following illustrates its use:—

R	
Crude Coal Tar	2
Zinc Oxide	2
Starch	5
Delyl Extra	2
Soft Paraffin	ad 50

The Coal Tar and Delyl Extra are levigated together, the sifted zinc oxide added, the soft paraffin then incorporated and finally the starch.

Lotions with coal tar can present problems:—

R	
Coal Tar	5i
Sulphur	5ii
Aqua Rosae	ad 5vi

Any attempt at straightforward dispensing meets with failure. Even adding the tar to a drachm of Ext. Quillaia Liq. does not yield a presentable product, but the following formula does:—

R	
Coal Tar	5i
Bentonite	5i
Sulphur	5ii
Ext. Quill. Liq.	5ii
Aq. Rosae	ad 5vi

The method is to mix the bentonite and the sulphur, and add the coal tar, triturating to a thick paste. Dilute this with the Extract of Quillaia and then dilute gradually with the vehicle.

An equally elegant preparation can be made, using a 5% Lanette Wax Emulsion. Experience shows that it is best to make the lanette wax emulsion first by heating the water to about 60° C. and the wax to the same temperature, mixing and stirring until cold.

A good technique is to place a few drops of this emulsion in the mortar and triturate it around the sides, then add the tar, followed by the rest of the emulsion. This prevents, as is not unusual, the larger portion of the tar adhering to the sides of the mortar. Other powders can be incorporated finally. A similar effect is produced by triturating the coal tar with castor oil and then incorporating the lanette wax cream, but the finished product is streaky.

Sometimes tar is prescribed in the following type of combination:—

R	
Coal Tar	min. XXX
Zinc Oxide	gr. XL
Ol. Olivae	5ii
Aq. Calcis	5ii

This is best compounded by making the calcium oleate water-in-oil emulsion first, by shaking together the oil and the lime water. It is essential that the emulsion be a good one, so it may be necessary to add a few drops of oleic acid or even a little solid calcium hydroxide; if the product can be homogenised, so much the better. A little of the cream is then placed in the mortar, the tar added and triturated, and the rest of the emulsion worked in, the zinc oxide being added lastly.

Tar is not prescribed in pill form with any fre-

quency, but one grain tar pills can be made according to the following formulae:—

R		R	
Tar	gr. i	Tar	gr. i
Curd Soap	gr. 2	Acacia	gr. i
Beeswax	gr. 4	Beeswax	gr. 4
P. Glycyrrh.	gr. 11	Liquorice	q.s.
Acacia	gr. i		
Glucose	q.s.		

The right-hand formula gives a smaller but softer pill. I imagine that if there is no objection to giving tar internally, then there can be less objection to putting beeswax in the pill.

In the Kaewendel Mountains, which separate Bavaria from the Tyrol, are found deposits of "oelstein" or "stunkstein," a greyish bituminous schist, which on destructive distillation yields an oil, ichthol. This crude oil, produced largely in the village of Seefeld, is produced by the decomposition of the compressed remains of long dead fishes and marine animals, which comprise the schist. A yield of anything from 1-10% is obtained, and this oil is treated with cold concentrated sulphuric acid, to yield a sulphonic acid, which is subsequently neutralised with ammonia to yield ammonium ichthysulphonate or ichthamol.

The original product was introduced by Professor Unna in 1886; since that time distillates from other deposits have been made and treated in the same way, and feature in Pharmacopoeias under various names.

Ichthamol is a blackish brown viscous liquid with a characteristic odour; it contains about 50% of water and other volatile matter, some 5-7% of ammonium sulphate and about 1% of a volatile oil with a strong, penetrating odour. On storing, ichthamol becomes more viscous, approaching the semi-solid.

It is very difficult to fix standards for ichthamol, but the official standards require that when dried to constant weight at 100° C. it should contain not less than 10.5% of organically combined sulphur and not more than one-quarter of the total sulphur in the form of sulphates.

Ichthamol is soluble in water, partly so in alcohol and ether, and mixes with glycerine and oils. It has been used in endless combination, and since it has numerous incompatibilities it gives rise to some difficulties.

The 1923 B.P.C. lists eleven different combinations, but only six of these are listed in the '49 issue and in the '53 issue. Ichthol has been given internally. Some authorities* recommend that pills of ichthamol be made with liquorice and tragacanth, others recommend powdered liquorice alone as the excipient† or calcium phosphate.‡ In practice, quite good pills can be made by adding up to 25% of acacia and sufficient starch to stiffen. These pills harden well and disintegrate quite quickly.

Ichthamol has a fairly wide range of incompatibilities. Acids decompose it, the free sulphonic acid being thrown down as a dark resinous mass. Similarly it gives precipitates with salts of many metals, e.g., Zn, Fe, Pb, Cu, Ag, Ca, and Hg. Alkalies will, of course, liberate ammonia from it.*

If it is difficult to make the prescribed quantity of ichthamol into a reasonable small pill, then a good plan is to stiffen it into a suitable mass with starch, roll it into a pipe, and cutting it into equal parts, insert each one into the appropriate size of hard gelatine capsule. Some workers, having regard to the fact that ichthamol contains a fair amount of water which might soften the capsule, adopt different methods to prevent this. It is possible to coat the inside of the capsule with a thin film of oil, or to mass the ingredients with a base such as soft paraffin. If, however, sufficient acacia be added to the mass, this absorbs the water, and inhibits the softening of the hard gelatine coat.

External applications, such as lotions and ointments, present problems if an elegant preparation is to be

achieved. The 1953 issue of the B.P.C. lists a 10% admixture of ichthamol in glycerine and an ointment of ichthamol 1 in 9 in a mixture of equal parts of wool fat and yellow soft paraffin. These, then, are apparently the bases of choice. Previous issues of the same work list variants of these. The 1923 issue had a Pasta Ichthamol Co. consisting of 25% of ichthamol with 2½% phenol, 50% starch and 22½% water. The simple ointment had 10% ichthamol in a base of anhydrous lanolin ointment, and a compound ointment in the same base containing in addition to ichthamol, sulph. praecip, zinc oxide, starch, resorcin, salicylic acid and naphthol.

The 1949 B.P.C. had a Cremor Zinc Oxide et Ichthamol, the base being wool fat, oleic acid, arachis oil and liquid paraffin with lime water, forming a water in oil cream.

The Codex Medicamentorum Neerlandicus of 1942 lists the following "shake" lotion, ichthamol 5, zinc oxide 10, talc. 10, glycerine 40, water 40.

Despite the many official formulae, physicians tend to prescribe it in combination which require considerable ingenuity to obtain a good product. Some of these are water in oil emulsions or can only be made into such. There seems to be no indication as to whether a water in oil or an oil in water cream is therapeutically preferable. Very occasionally ichthamol is prescribed in mixture form. Here is an example illustrating its incompatibility with alkaloids:—

℞	
Ichthamol	gr. XL
Quinin. Sulphas.	gr. XVI
Tr. Nucis Vom.	℥iii
Aq. ad.	℥iv
Sig. ℥i, t.d.s.	

Since alkaloids and ichthamol yield a precipitate, one method of dispensing that can be suggested is to suspend with mucilage of tragacanth. Half an ounce of mucilage is mixed with the ichthamol and diluted to two ounces, another half-ounce of mucilage being used to triturate the quinine, and this also diluted. The two dilutions are then mixed, and the tincture added.

Another alkaloidal combination is:—

℞	
Cocaine	3%
Ichthamol	10%
Glycerine	40%
Water	ad 100%
Misce flat lotio. mitte	℥iv
Sig.: Applie manque nocte.	

Since this is a lotion, suspension with gum is out of the question. In any case, cocaine is not soluble in this combination. One method of compounding is to seek permission to substitute alcohol for the water. A better plan is to triturate the ichthamol and glycerine together, dilute with 8% Bentonite suspension, and add a solution of cocaine hydrochloride in water.

The following script is hopelessly incompatible:—

℞	
Ichthamol	5%
Zinc Oxide	
Mag. Carb.	ana 3%
Liq. Calcis	ad ℥ VI

Both the magnesium carbonate and the lime water tend to liberate ammonia from the ichthamol, but nevertheless the finished product has a quite satisfactory appearance.

Combinations such as the following present little difficulty:—

℞	
Ichthamol	℥i
Starch	℥ii
Olive Oil	℥iii
Lime Water	℥iii

and ointments like these compound quite easily:—

℞		℞	
Ichthamol	10%	Ichthamol	℥iv
Paraff. Liq.	℥iii	Cera Emuls.	℥i
Paraff. Molle		Water	℥iss
Flav.	ad ℥ii		

Glycerine Amyli is best recently made for scripts of this type:—

℞	
Ichthamol	℥i
Glyc. Amyli	℥i

with which it mixes quite well. Where, as in the above scripts, the base is an emulsion, it is better to make the emulsion first and incorporate the ichthamol with this.

Juniper Tar Oil, otherwise Oil of Cade, is produced by the destructive distillation of the wood of the trunk and branches of *Juniperus Oxycedrus* et al. It is largely produced in Southern France, hence the common name of Huile de Cade; N. Africa and Spain also produce it.

The main chemical constituent is a sesquiterpene, cadinene, together with some of the decomposition products, such as acetic acid.

The dark brown to black liquid has an empyreumatic odour and a bitter acrid taste. It is heavier than water (S.G. 1.01) and very slightly soluble in it, rendering it acid and giving the solution the power of reducing Fehling's solution. Otherwise it is soluble in chloroform and in ether and in glacial acetic acid.

Oil of Cade is very subject to adulteration with coal tar oil and wood tar oil, or pine tar oil. The latter can easily be detected by shaking a petrol ether extract of the suspected tar with a solution of copper acetate. An emerald green colour indicates the use of pine tar oil. Furfural, detected by adding aniline to the aqueous extract when a bright red colour develops, also indicates adulteration.

The 1923 B.P.C. had a Parogenum Empyreumaticum, consisting of 25% oil of cade in a base of liquid paraffin, oleic acid and ammoniated alcohol. The same Codex also had an ointment of equal parts of the oil and beeswax. The present B.P.C. uses it only in Ung. Resorcin Co. Otherwise it has been variously combined:—

℞	
Oil of Cade	2%
Bentonite	8%
Water	ad 100

This lotion is quite simply made by sprinkling the bentonite on the surface of warm water. The oil of cade can then be stirred into this suspension. An excellent water in oil lotion is made according to the formula:—

℞	
Oil of Cade	℥ss
Ol. Arachis	℥iii
Ac. Oleic	min. x
Aq. Calcis	ad ℥vi

In ointments it is miscible with Soft Paraffin, Adeps Lanae, Coconut Oil, Emulsifying Ointment and many others.

Oleum Rusci is the official name for Birch Tar Oil, the thick liquid used in the preparation of Russian Leather. Prepared by the destructive distillation of the wood and bark of *Betula Alba*, it is also known as Oleum Betulae Albae or Oleum Rusci Pyrolieneum. Having an S.G. of 0.926-0.955, the oil does not harden on keeping and resembles oil of cade in its properties and usage.

Produced originally in Russia, Dutch and German varieties appear on the market, and these can be distinguished from the genuine by shaking the samples with water and filtering and adding potassium cyanide solution. The genuine product gives a pink colour,

which ammonia intensifies, but the other varieties do not give this colour.

Pur Tar Oil, also used to adulterate it, gives a green colour when a petrol ether solution is shaken with copper acetate solution. Steam distillation produces Rectified Oil of Birch, which consists chiefly of guaiacol and cresol with xyleneol.

Birch Tar is soluble in fats and oils, which fact helps in dispensing problems. It is partially soluble in alcohol, and a Liquor Rusci is made by digesting Birch Tar and Quinaia with alcohol, giving a product resembling Liquor Picis Caro., in that on dilution it gives an emulsion.

Ung. Rusci Co. has a base of hydrous lanolin and soft paraffin, and it is a good plan in formulating ointments to follow this type of formula, although a fair amount of water can be incorporated. With Cera Emulsificans a cream can be made or even a lotion:—

R	
Ol. Rusci	3ii
Adep. Lanae	3ii
Paraff. Moll. Flav.	3iii
Water	3ss

or	
R	
Birch Tar Oil	5%
Cera Emulsif.	10%
Paraff. Liq.	15%
Water	ad 100

When Tar is prescribed without further qualification Wood Tar or Stockholm Tar, i.e., Pix Liquida, is intended. Produced by the destructive distillation of the wood of various species of *Pinus*, it is a dark brown to black liquid, having a strong empyreumatic odour. When fresh, it has a weight per mil. of 1.020-1.150, but on keeping tends to separate into a lower granular layer, due to the crystallisation of catechol and resin acids, and an upper syrupy layer.

The composition is very complex, and the following can be distilled off, pyrocatechol, phenol, guaiacol, cresol, toluene, phlorol, xylene and naphthalene, leaving a residue of pitch.

Although insoluble in water, sufficient of it does dissolve to colour the water and give it the characteristic odour and taste of tar, at the same time rendering the water acid. It is also soluble in alcohol (1-10), in chloroform and ether and glacial acetic acid. This latter fact serves to distinguish it from all other tars save that derived from beechwood. It can also be distinguished from beech tar by the fact that a petroleum ether extract gives a green colour with solution of copper acetate, and from birch tar by the red colour which an aqueous extract gives with a solution of ferric chloride.

The 1954 B.P.C. mentions Ung. Picis Liq., comprising 70% of tar in a base of hard and cera flava; other external formulae having appeared in previous issues of the Codex.

Tar has been given internally, either as the entire product or an aqueous extract of it. The 1923 B.P.C. had an Aqua Picis, made by shaking one part of Tar with 10 of water for fifteen minutes, decanting and filtering. There were also two syrups, Syrup Picis Liq. and Syr. Picis cum Codeine. The Syrup was made by triturating 1% of tar with sand and water, discarding the water, and then exhausting the residue with alcohol. This solution was used to triturate a mixture of Mag. Carb. Levis and sugar, sugar then being dissolved in the filtrate from this, the volume being made up to 100%.

Tar has also been prescribed as pills. Martindale quotes the following formula:—

R	
Tar	1
Soap	1
P. Trag. Co.	4
P. Glycyrrh.	2½

This pill, however, tends to be bulky, and a better formula is:—

R	
Tar	gr. 1
Acacia	gr. 1
Beeswax	gr. 1
Rad. Glycyrrh.	q.s.

In order to reduce the bulk, the mass referred to in Martindale can be left soft and rolled into a pipe and enclosed in hard gelatine capsules. Rarely is Stockholm Tar prescribed in mixtures, but the following has cropped up:—

R	
Stockholm Tar	min. 30
Tinct. Bellad.	min. 90
Aq. Cinnam.	ad 3vi

a prescription which it was found possible to dispense by mixing the Tar with Tinct. Quillaia and then diluting.

Ointment and creams containing Tar are prescribed in innumerable combinations. Ordinary greasy ointments are exemplified by:—

R		Picis Liq.	min. 90
Pix Liquida	3ii	Wool Fat	3ii
Hard Paraffin	10%	Soft Paraffin	ad 3i
Soft Paraffin	ad 3iss		

Washable ointments or creams can be formulated, using Emulsifying Wax, the proportion of wax being varied to yield a product of the required viscosity. Ung. Emulsificans or Ung. Emulsificans Aquosum are suitable bases.

Lotions are not so easy to formulate. In the following:—

R	
Picis Liq.	gr. XX
Olive Oil	
Aq. Calcis	p.a. ad 3iii

The tar tends to become granular unless it is previously mixed with an equal amount of castor oil, and the mixture triturated with the oil-lime water emulsion.

References

The Tars

- (1) British Pharmaceutical Codex.
- (2) Handleiding tot de Practische en Theoretische Receptur. C. F. van Duin, 1954.
- (3) Scoville's Art of Compounding.
- (4) Pharmaceutical Dispensing, by W. J. Husa, 1951.
- (5) Martindale's Extra Pharmacopoeia, Vols. I and II.
- (6) Aust. J. of Ph., Nov., 1953, 1097.
- (7) J.A.Ph.A., 1954, 15, 167.
- (8) Ibid, 1951, Vol. 3.

PETHIDINE: DANGERS OF ADDICTION

The Ministry of Health has been asked by the World Health Organisation to direct attention to the views of its Expert Committee on Drugs Liable to Produce Addiction on the dangers of the addiction potentiality of pethidine, and the need for the same care in its use as with morphine. The Expert Committee considers that an important factor in the development of pethidine addiction has been the attitude of physicians towards the drug, based upon the widespread belief that it is less dangerous in this respect than morphine. The Expert Committee is convinced that experience with the drug both in experiments and in clinical practice is contrary to this belief; the Expert Committee is of the opinion that pethidine is as dangerous as morphine as a potential agent of addiction, that its use should be undertaken only with full realisation of this danger, and that its administration should be approached with the same attitude and attended by the same precautions as are recognised for morphine.

ACTIVE FIELDS IN SOIL MICROBIOLOGY

Abstract of an address by Dr. H. G. Thornton to the Microbiology Section, Society of Chemical Industry, London.

"In its early years, soil microbiology concerned itself with the isolation and pure culture study of micro-organisms that could carry out specific chemical changes known to take place in soil. The realisation of the complexity of the population arose as a result of Russell and Hutchinson's work on partial sterilisation. This led to surveys of the main groups of organisms, which still continue, and also to attempts to develop better methods for estimating their numbers in soil. These include plate counts and direct microscope counts of organisms, the latter giving very much higher numbers.

It has been found that soil immediately adjacent to plant roots, the Rhizosphere, contains a particularly dense micropopulation, which also differs in composition from that found in soil away from the roots. The study of this population now attracts much interest, bearing, as it must do, both on the nutrition of the roots and on the control of root disease.

A field that has been developed much of recent years is that of soil aggregation. It has been shown that micro-organisms, including fungi, actinomycetes and slime-producing bacteria, are concerned with the formation of the water stable soil crumbs, which give a desirable structure.

On the chemical side, the role played by micro-organisms in the cycles of manganese, iron and sulphur have been partially elucidated. The nitrogen cycle continues to attract interest, which has led to

recent work on the biochemistry of nitrogen fixation and nitrification and to the isolation of organisms capable of directly nitrifying certain oximes. It is still uncertain what organisms are mainly responsible for non-symbiotic nitrogen fixation in soil, and attention is being paid to the anaerobic Clostridia, since the numbers of Azotobacter cells found in most soils seems to be insufficient to account for the nitrogen fixed.

Nodule bacteria (Rhizobium) have been studied as regards the distribution of different strains in soil, particularly those ineffective in fixing nitrogen. The possibility of replacing a soil population of ineffective strains with more effective strains by seed inoculation has led to a study of inter-strain competition in the soil and rhizosphere.

Competition between organisms in soil has also been much studied with a view to the possibility of controlling root disease by means of antibiotic-producing organisms. Evidence of the activity of antibiotics in soil has been obtained, and some success achieved in controlling root disease in sterilised soil by means of antibiotic-producing micro-organisms. A vital problem, however, is that of establishing such organisms in unsterilised soil in competition with the natural micropopulation. To do this it may be necessary to modify the soil environment so as to make it differentially favourable to the introduced organism.

The production of a changed equilibrium between the components of the soil population is a central problem in soil microbiology. This can be brought about by partially sterilising the soil, but a more detailed study of this process is needed in order that it may be controlled.—"Chemistry and Industry," June 25, 1955.

Abstracts of Papers Given in Section "O" A.N.Z.A.A.S., 1955

"THE BINDING OF CARDIAC GLYCOSIDES WITH SERUM PROTEINS"

Professor R. H. Thorp

Several studies have been described in the literature of the binding of cardiac glycosides to serum proteins using biological assay methods to determine the reduction in toxicity of the glycosides when so bound, often after dialysis has been used to remove the unbound drug.

In view of the lack of precision of such assay methods, and since there has been no comprehensive comparison of protein binding in a large range of cardiac glycosides, this phenomenon has been re-examined.

The method employed has been dialysis of mixtures of the cardiac glycoside and either serum or crystalline bovine serum albumen solutions, and the estimation of the concentration of cardiac glycoside in the dialysate when equilibrium has been reached. The glycosides were estimated by ultra-violet spectrophotometry, making use of the absorption peak at 220 m μ .

The glycosides of *Digitalis lanata* of the A and C series have been examined, and it has been found that binding is strongest in the A series, that is, digitoxigenin, digitoxin and digilanid A, and it is feeble in the C series of glycosides, digoxigenin, digoxin and digilanid C. The glycoside concentrations employed were 10⁻⁴ molar and that of the albumin solution was 2%.

No significant differences were found in the binding affinities of the genin, desgluco-glycoside or the lanatoside of either series, thus indicating that this property is associated with the structure of the genin and the sugar moiety is not important in this case.

Further work is in progress to include the B series of glycosides in the comparison before more extensive publication.

"ON THE POSSIBLE EXISTENCE OF A CARDIOTONIC PRINCIPLE IN THE LIVER"

Miss J. Pennefather, Professor R. H. Thorp and L. B. Cobbin

There have been reports in the literature over the last twenty years indicating the possible presence of new types of cardiotonic substances in tissues. One such report (Green, J. P., Am. J. Physiol., 1952, 170, 330) described a preparation capable of improving the work capacity of the isolated papillary muscle of the cat heart and prepared by solvent extraction of saponified liver. This work has been repeated and a similar active preparation obtained. Further samples of liver were extracted with aqueous acetone and the extract fractionated between ether and light petroleum. Activity was also found in these preparations in the light petroleum fraction, but separation appeared to be incomplete.

This work indicates the presence in liver of a cardiotonic substance of a lipid soluble nature, resistant to saponification and thermostable. Further work is in progress and will be reported elsewhere.

"THE PHARMACOLOGY OF AN ALKALOID FROM HIMANTANDRA BACCATA"

L. B. Cobbin

Himantandra baccata contains an alkaloid, himandrine, of structure at present not fully determined. This substance was prepared as part of the Phytochemical Survey of Australian Plants by the late Dr. G. K. Hughes and his colleagues in the University of Sydney.

In anaesthetised cats himandrine causes a fall in blood pressure and slowing of the heart when given by intravenous injection. Neither effect is observed in spinal preparations, and hence are apparently central in origin. This alkaloid shows no ganglion blocking action or sympatholytic effects. Further examination of its central nervous activity is in progress.



IS YOUR ANSWER TO THE OPEN-SELLERS

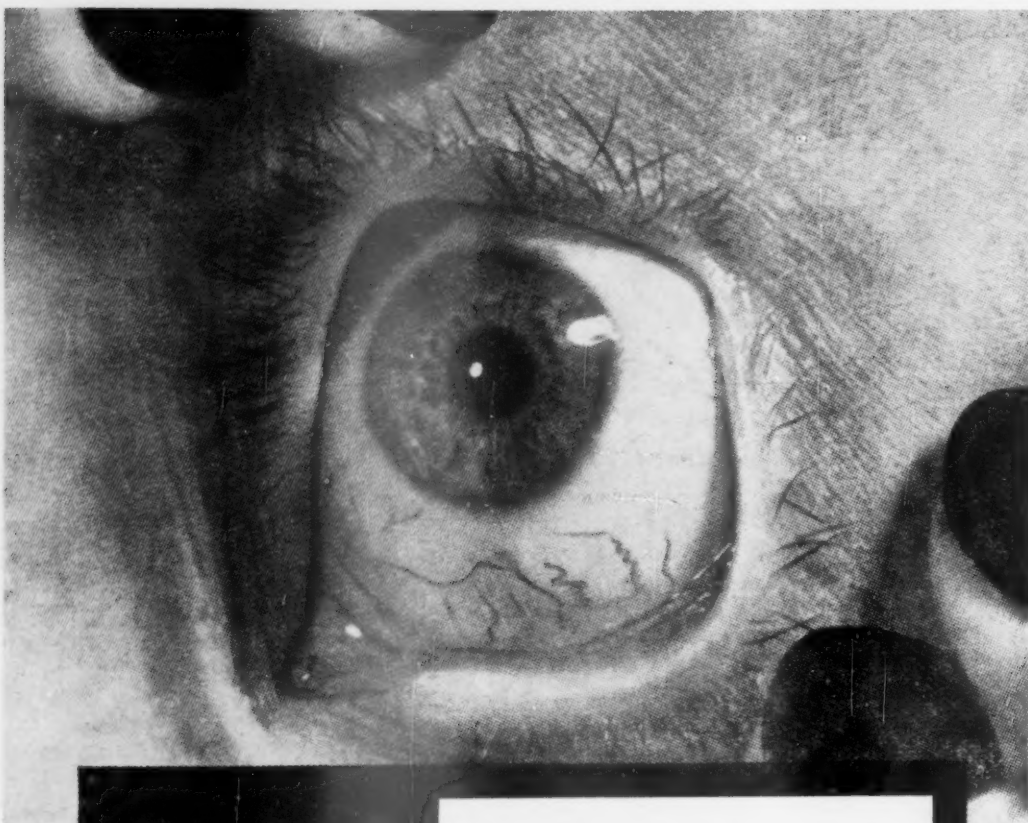
Vigorous competition from grocers, chain-stores and general stores is developing rapidly in the suntan preparation market. New open-selling brands give these traders an opportunity to make sales that would normally be made in Pharmacy.

To offset this competition, it is essential to display and recommend only lines that can be sold through Pharmacy.

MASS-DISPLAY KWIK TAN in your windows and on your counters right throughout the summer months. Use the natural-colour Kwik Tan display material, thereby "tying in" with the powerful newspaper and magazine advertising which is appearing continuously from now until March.

ALWAYS PERSONALLY RECOMMEND Kwik Tan and train your assistants to do the same. Never lose an opportunity to sell this profitable chemists' only brand.

N.13.55



**Nontoxic
effective
physiologic
ophthalmic
therapy**

In conjunctival, eyelid,
corneal infections
SOLUTION
PROPION OPTHALMIC

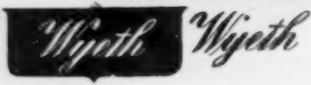
Ophthalmic Solution Sodium Propionate 5%

IN ACUTE INFECTION . . . "appears efficacious in about as short an interval as any other drug used and seems to have no unpleasant sequelae."^{*}

IN CHRONIC CONDITIONS . . . "has proved efficacious and non-irritating" when therapy is prolonged.

SOLUTION PROPION OPTHALMIC usually has a soothing effect, giving prompt subjective relief.

SUPPLIED: Bottles of 4 fl. dr. with dropper.
^{*} Theodore, F.H.: Arch. Ophth. 41:83, 1949.



REGISTERED TRADE MARK

INTERNATIONAL LIMITED (Inc. In U.S.A.) Cliff St., Parramatta, N.S.W.

Prep oph/1P/56

DISPENSING PROBLEMS

High Concentrations of "Re-active" Drugs in Cream

R		
Acid. Salicyl.	3%	
Phenol.	1%	
Liq. Picis Carb.	10%	
Potass. Sulphurat.	2%	
C.C.S. Base	3vi	

As it was thought that these concentrations would be certain to crack C.C.S., it was decided to substitute the non-ionic Aqueous Sorbolene Cream A.P.F., as this is more capable of standing such high concentrations. The preparation showed no sign of separation.

—J.M.M. (Vic.)

Phenobarbitone and Soluble Aspirin

R		
Acid. Acetylsalicyl.	10 gr.	
Calc. Carb.	3 gr.	
Pot. Cit.	20 gr.	
Phenobarbiton. Sod.	1 gr.	
Syr. Aurant.	30 m.	
Aq. ad	1 fl. oz.	
Ft. Mist	mitte 10 fl. oz.	
Sig.	1 fl. oz. c. aq. t.d.s. p.c.	

Solution of the Aspirin was effected in the Potassium Citrate solution. The Calcium Carbonate was added to this solution.

As effervescence ensued, and as Mist. Calc. Aspirin is known to precipitate Phenobarbitone from Phenobarbitone Sodium, the insoluble form was suspended with Mucilage of Tragacanth.

—C.T. (Vic.)

[The reaction of this prescription will be measured and reported in this column.]

Buffered Penicillin in Honey

R		
Calcium Penicillin	100,000 u.	
Honey to	10 ccs.	
Buffer to pH 6.	For veterinary use.	

The intention of the prescriber is to maintain the stability of this preparation by the use of a suitable buffer, but as the phosphate type of buffers of the A.P.F. would give a precipitate of calcium phosphate, it was decided to use a suitable amount of sodium citrate.

The original pH of the honey was approximately 4 to 5 (tested with Universal Indicator) and as the sodium citrate is not readily soluble in the vehicle, a small proportion of water was included in the formula. 1% of sodium citrate was dissolved in 1 ml. of water, the penicillin added, and then the honey to volume of 10 ccs.; using aseptic precautions throughout. The solution when tested gave a pH reading of approximately 6.

—A.J.B.



This preparation was remade at the Victorian College of Pharmacy, and when tested electrometrically gave a pH reading of 5.35 (original pH of honey used was 4.02). As the penicillin is most stable within pH 6 to 6.8, a further quantity of citrate was added, giving 2% strength of the buffer, and a final pH reading of 6.22.

Various samples of honey gave figures ranging from 4 to 5, so for general use 1 to 2% of sodium citrate would be most suitable.

Another similar type of prescription is:

Calcium Penicillin 200,000 u.
buffer to pH 6 in honey.

Sig:—25,000 units as a mouth paint bd.

The calcium penicillin with 2% sodium citrate was dissolved in 30 min. of distilled water and the volume adjusted with honey to 120 min., giving in 15 min. 25,000 u. of calcium penicillin.

The directions were altered accordingly.

FORENSIC POINTS

Victorian Labour and Industry Act 1953

This Act regulates inter alia the hours of closing of shops. Section 80(2) states: "... every shop ... shall be closed and kept closed for the whole of each day which by determination of the Wages Board having jurisdiction in respect of employees in such shop is to be observed as a public holiday."

In the case of chemists the Wages Board determination prescribes rates of pay for public holidays, but does not direct that any specific day is to be observed as a public holiday.

Section 80, 1(c) then applies. This refers to when shops shall close; "on all other days, from the hour of six o'clock ..."

Commonwealth Spirits Act 1906-23

Rectified Spirit

All pharmacists buy S.V.R. at a concessional rate of duty, viz., 25/- per proof gallon. The spirit is bought under Excise Tariff Item 2 (M).

The pharmacist then is privileged as regards his S.V.R. supplies. As usual with privilege, he finds himself immediately restricted. Restricted in that S.V.R. purchased in this manner must be used only for certain medicinals, toiletries, cordials and fruit essences.

For other purposes S.V.R., under Excise Tariff Item 2 (O) bears a rate of excise duty of 75/6 per proof gallon.

S.V.R. then, as purchased by the pharmacists under 2 (M) cannot be sold over the counter for any purpose.

Prescription Proprieties and New Drugs

By Geoff K. Treleaven, Ph.C., F.P.S., of the Pharmaceutics Department, Victorian College of Pharmacy

(For most of the products listed, full information as to dosage may be obtained from the "Prescription Proprieties Card Service" of "The A.J.P.").



REVISED LIST OF ACTH PREPARATIONS

CORTICOTROPHIN B.P. Addendum 1955.

Other B.P. Names: Adrenocorticotrophic Hormone; ACTH

The following proprietary preparations are available:—

Strength	Proprietary Preparations and Manufacturers.
2.5 i.u.	Schering A.G.
10 i.u.	Schering A.G., Crookes, C.S.L., Acton (D.H.A.), Cortrophin (Organon).
20 i.u.	C.S.L.
25 i.u.	Cortrophin (Organon), Crookes, Schering A.G..
50 i.u.	Crookes.

ACTH DEPOT PRODUCTS FOR PROLONGED EFFECT:

20 i.u. per ampoule	Androcort (Andrews).
20 i.u. per c.c. (5 c.c.)	Schering A.G.
40 i.u. per c.c. (5 c.c.)	Schering A.G.
40 i.u. per vial	Cortrophin Z (Organon).
80 i.u. per vial (veterinary)	Cortrophin Z (Organon).

(ACTH Depot is not a B.P. Monograph)

SYNTHETIC ANTIMALARIALS

Official or Approved Names	Proprietary and Other Names
*Mepacrine HCl B.P.	Atebrin (Bayer), Quinacrine (M & B), Avlon, Boots, Acriqueine, Arichin, Chemiochin, Chinacrin, Methoquine, Metoquine, Palusan, Acrichine, Atabrine, Erion, Palacrin, Italchin.
Mepacrine Methanesulphonate Injection B.P.	Avlon.
*Chloroquine phosphate (B.P. Add.)	Aralen (Bayer), Avlochlor (I.C.I.), Andrews, Resochin, Sanoquin, Tanakan.
*Chloroquine sulphate (B.P. Add.)	Nivaquine (M. & B.).
*Amodiaquine	Camoquin (P.D.), Flavoquine, Miaquin.
*Pamaquin B.P.	Praequine (M. & B.), Plasmoguin (Bayer), Avlon, Aminoquin, Plasmochin, Plasmocide, Beprochin, Rhodoquine, Fournneau-710, Gamefar, Quipenyl.
*Proguanil HCl B.P.	Paludrine (I.C.I.), Chlorguanide HCl, Drinupal HCl, Balusil, Palusil, Guanatol, Bigumal, Diguanyl, Chloriguane, Tirian.
Pyrimethamine	Daraprim (B.W.), Malocide.
*Primaquine diphosphate	Avlon, Stearns.

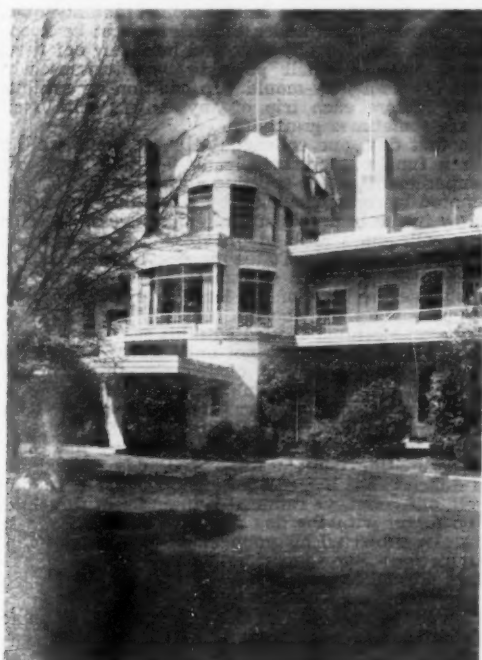
* N.H.S. Items.

Nicholas Institute For Medical And Veterinary Research

Official Opening by Prime Minister

Pharmacological research into barbiturate and morphine antagonists will be given high priority in the programme of the Nicholas Institute for Medical and Veterinary Research, opened by the Prime Minister, the Rt. Hon. R. G. Menzies, C.H., Q.C., M.P., on December 2. The whole project he described as "an imaginative stroke of genius."

The large gathering which witnessed the opening was drawn from the executive heads of other houses in the drug trade, senior executives of the Pharmaceutical Organisations and Departments of the University of



"Burnham Beeches," the magnificent country home of the Nicholas family, at Sassafra, in the Dandenong Ranges, now set apart for research purposes. The other three illustrations give interior views of some of the laboratories.

Melbourne. Lowering skies and occasional showers ruled out an open-air function, but those unable to crowd into the spacious lounge where the Prime Minister spoke had a "grandstand" view from the balcony outside and heard the speeches broadcast over the loud-speaker system.

Formerly "Burnham Beeches," Sassafra home of the Nicholas family, this new research centre, sponsored by Nicholas Pty. Ltd., promises to render outstanding service to the poultry industry.

Conversion of this four-storeyed 70-room mansion, set in the Dandenong Ranges, began early this year. Bedrooms and dressing rooms have been transformed



into pharmacological, bacteriological, parasitological and ancillary laboratories. The former servants' quarters now house the electronic, electro-cardiological, electro-encephalographical laboratories, the bacteriological kitchen, tissue preparation room, refrigerators and the workshops for servicing and building apparatus.

Administrative offices, research library, lounge and dining-room are situated on the ground floor.

Poultry runs, sheep pastures and arable paddocks for growing feedstuffs have been established in 150 acres of parklands and market gardens.

There is a set of brick kennels, now used for the housing of experimental dogs and cats, while the hot-houses which held the once famous Nicholas orchid collection have been adapted for the breeding of small experimental animals such as guinea pigs, rats and mice.

The Assistant Director of Pharmacological Research, Dr. G. A. Bentley, M.Sc., is assisted by four senior

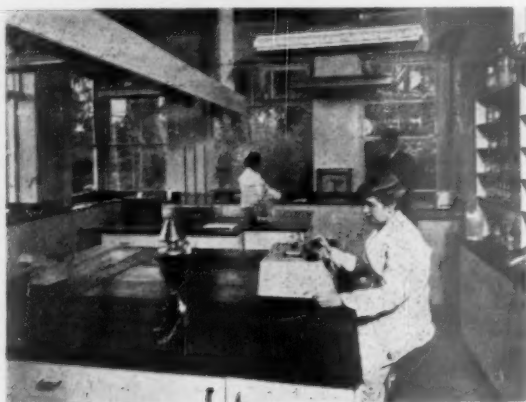


graduate pharmacologists, two senior biochemists, together with six laboratory assistants.

Professor F. H. Shaw, of the Department of Pharmacology of the University of Melbourne, is Honorary Consultant to the Institute's Pharmacology Division.

Dr. Bentley collaborated with Professor Shaw in the discovery of morphine and barbiturate antagonists and the biological testing of "Megimide" and "Daptazole."

Research at this institute will be conducted in close collaboration with the University of Melbourne, the C.S.I.R.O., and with kindred institutions throughout



the world. There will be an intimate liaison with those centres in France, Sweden and Britain, which are also investigating the action of these drugs, and particularly in clinical applications.

Toxicity research will also be conducted so as to develop better safeguards for their use.

In addition, research will be initiated in an attempt to discover the mode of action of the salicylates, including aspirin: this will be a long-term programme.

Mr. R. G. Smith, Ph.C., A.R.A.I.C., Nicholas Director of Research, said: "The Nicholas Institute will try to strike a balance between pure research and applied research aimed at specific products. A balance, too, will be kept between human and veterinary medicine, but it is expected that great benefits may accrue from mutual discussion and collaboration between scientists working in the two fields."

He added: "Subject only to prior protection of Nicholas interests by patenting, etc., scientists of the Nicholas Institute will be free to publish results of their research in scientific and technical journals and to present papers to learned societies."

TEN IMPORTANT RULES IN CONDUCTING A PHARMACY

We are indebted to Mr. Fred T. Hoimes, Launceston, for forwarding the following:—

1. Be strictly honest in dealing with customers and with employees.
2. Let your spoken word be your bond—lose money rather than prestige.
3. Be satisfied with nothing but the best—in quality and service.
4. Be courteous, kind, patient and tactful in all your conversation.
5. Preserve cleanliness—in your personal appearance and that of your staff—in your well-dressed window and carefully arranged stock.
6. Don't waste time. There is always plenty to be done in a pharmacy—find it and do it.

7. Receive travellers courteously, inspect their samples, buy wisely. A traveller may become an invaluable friend.

8. Watch your stocks closely and know your goods. Pay promptly and take your discount.

9. Aim always at establishing a goodwill in your business. Own-name products build goodwill and should improve ultimate profit.

10. Join your State Pharmaceutical Society and Guild pay your sub. promptly to encourage the men working hard in your interest.

FATHER'S DAY!

During the recent unseasonable outburst of fine weather an adventurous colleague of ours penetrated as far as Scotland on his summer holiday. Owing to the mysterious workings of destiny, his wife—the Master Planner of such occasions—was absent on the Continent at the time the expedition set off, and our colleague found himself in sole material and moral charge of his car, his two small children, a cocker spaniel puppy, and the various adnexa appropriate to such company. Our colleague's younger child becomes notably queasy on car journeys, and under the driving-seat he keeps a quantity of assorted oily rags and handkerchief tissues, together with a small portable vomitorium which started life as a jelly-mould. In addition he exhibits a "Kwell" before each trip of any length, with results that are sometimes gratifying.

The first day, our colleague tells us, went well. His children fought unobtrusively on the back seat to the accompaniment of ear-splitting shrieks, and the puppy attempted to commit suicide by struggling through the window in the intervals of strenuously licking the back of our colleague's neck at unexpected moments in the thick of the traffic. Toffee papers blew in our colleague's face, it rained so immoderately that he could scarcely see the back of the lorry in front, and he was stung by a wasp. In short, a perfectly normal drive.

The next morning, flushed with his easy victory of the day before, our colleague not only omitted to establish a satisfactory blood-level of hyoscine in advance of breakfast, but also unthinkingly permitted the consumption of bacon and eggs. It was not until he was tying the rope around the luggage on the back of the car that he was brought to his senses by his younger child intimating that she felt sick, Daddy. The situation was difficult, but not insuperable. Hastily producing a Kwell, our colleague rammed it in and sent the children off on a run with the dog to shake it down. On their return he subjected his younger child to a brief clinical examination; her deportment and colour appeared within normal limits. It was getting late, and our colleague had three hundred miles to go.

They had gone twelve of them when the inevitable happened. Our colleague had been listening to the snatches of sacred song from the back and was congratulating himself on an undeserved escape when, in the middle of the second verse of Jesus us shine, the Kwell shot across the car like a bullet and embedded itself in the dashboard. Fortunately, our colleague was not in the direct line of fire, and the brunt of the main attack was taken by the puppy, who set up a pained barking. With some difficulty our colleague manoeuvred the car to the side of the road and produced the handkerchief tissues and the oily rags, it being now too late for the small portable vomitorium. During the mopping-up operations it proved necessary to remove his younger child's new coat, which he laid carefully on a wall beside the road until he had serviced the underlying cardigan and dress. After he had cleaned up the car and pacified the spaniel he inserted another Kwell and started off again to the accompaniment of further sacred music. It was not until fifty miles further on that his younger child complained of feeling cold.

—"In England Now," "The Lancet," October 8, 1955.

TIME IS MONEY!

Valuable time can be saved by dispensing your Penicillin Drops the "Sigma" way. No sterilising or autoclaving is necessary, and your prescription is profitably dispensed in a matter of minutes.



- Shelf life of 9 months before dispensing.
- Packed in $\frac{1}{2}$ and 1 ounce Sets to provide a variety of strengths.

SIGMA PENICILLIN DROP SETS

are recommended for the
SPEEDY, ACCURATE AND DEPENDABLE
dispensing of

- **PENICILLIN EYE DROPS**
- **PENICILLIN EAR DROPS**
- **PENICILLIN NOSE DROPS**

Back Sigma Medical Advertising and Detailing by telling your Doctor that you carry supplies for instantaneous dispensing.

ALWAYS DISPENSE SIGMA PENICILLIN PREPARATIONS.

Prepared in the Penicillin Laboratories of

SIGMA

SIGMA CO. LTD., MELBOURNE

Interstate Distributors:

The Wholesale Drug Co. Ltd., Sydney.
Queensland Druggists Ltd., Brisbane.

Southern Drug Co. Ltd., Adelaide.
Rumbles Ltd., Perth.

In the treatment of **TINEA**

A wide range of medicaments has been used and the latest of these to be found effective are the unsaturated fatty acids and the phenylmercuric compounds.

DERMECYL

Treatment with undecylenic acid and its salts has been available in the form of Dermecyl Ointment and Powder, and has been found to be highly successful. No one treatment, however, proves to be 100 per cent. effective.

To provide an alternative treatment for those cases which do not respond to the fatty acid therapy, Phemycete is now available.

PHEMYCETE

contains 0.125 per cent. of phenylmercuric acetate in a water-miscible base and is packed in tubes of 2 ounces.

Distributed throughout Australia by

ALL **D·H·A** HOUSES

Guild Obtains Travelling Scholarships Grants

Pfeiffer Foundation's Splendid 4-Year Donation

Link With Warner-Lambert Pharmaceutical Organisation

The Federal Council of the Guild has very great pleasure in announcing that the Pfeiffer Foundation of the U.S.A. has donated 3375 dollars (about £A1500) a year for a period of four years, to provide travelling scholarships to the U.S.A. The first will be awarded in 1956.

The Gustavus and Louise Pfeiffer Research Foundation was established by a former president of William R. Warner & Co., now part of Warner-Lambert Pharmaceutical Co. of U.S.A. Their Australian subsidiary is Warner-Lambert Pty. Ltd., of Sydney, which is the parent company of William R. Warner & Co. Pty. Ltd. (ethical preparations); Richard Hudnut Pty. Ltd. (cosmetic and toilet preparations) and Chamberlain's Pty. Ltd. (advertised proprietaries, including Listerine)—all well-known to pharmaceutical chemists of Australia.

First of Its Kind

This fine gift—the first of its kind ever made through the Guild—was announced in a letter from the Board of Directors of the Foundation to the Federal President of the Guild (Mr. Eric Scott). Mr. Scott said: "It is a gesture first of all from one English-speaking nation to another of friendliness and practical interest. It also recognises the achievements and prestige of the Guild as a body of retail pharmaceutical chemists pledged by our rules and constitution to strive always to raise the standard of our profession to the highest possible point."

The Guild Federal Executive met in Melbourne on November 22, to discuss the terms of the grant, and decided that the scholarship should be a yearly appointment. This means that each year, before March 31, a graduate student or pharmaceutical chemist will be selected to travel to the U.S.A. to study some aspects of pharmacy that will help the chemists of Australia. It is thought that the candidate should be under the age of 30, should have a pharmaceutical background, and should be required to undertake, on return to Australia, to remain in pharmacy for at least two years. To as great an extent as possible, candidates from all States of Australia to have an opportunity to merit selection.

Mr. Scott, in announcing the news in his monthly Presidential letter to members of Guild State Branch Committees, wrote: This is the first time the Guild has been chosen as an instrument to mould some part of the educational future of pharmacy. Because it is Federal in its scope, and embraces the whole of pharmacy, it could prove the ideal medium for reception of scholarships to improve Australian pharmacy."

The Guild's View of Scholarship

The decision of the Pfeiffer Foundation was made after due consideration by its Board of Directors of a written submission by the Guild through Mr. Scott.

"The scholarship we envisage," he wrote, "would be predominantly for advanced scientific research, but not exclusively so. Each applicant would have to submit a project suited to his skill, knowledge, experience and qualifications. Each applicant would no doubt usually be supported by a recommendation from his own teaching department. It would be my Council's function to see that the successful applicant was a good ambassador, and that his project was likely to succeed."

Mr. Scott, in a long and detailed outline of the Federal Council's ideas, continued: "I would expressly

request that the terms of the award be left as wide and as flexible as possible in the hands of my Federal Council. My reason for this is that we see our potential scholarship winner specialising perhaps as a chemist, a botanist, a pharmacologist, a bacteriologist, a pharmaceutical-legal expert, an economist, a psychologist, or even a merchandiser; for it is upon such a tremendously wide field of learning that retail pharmaceutical practice, in all its many facets, impinges."

The Guild Federal Executive has acted promptly to initiate the scholarship, and on page 1419 of this issue of "The Australasian Journal of Pharmacy," the terms of application for the first Pfeiffer scholarship are advertised.

First Scholar Leaves Next Year

A noteworthy feature is that the first holder of the scholarship will go to the U.S.A. during the centenary year—1956—of the great Warner-Lambert organisation, which will mark the establishment 100 years ago of the business of William R. Warner.

What is the Pfeiffer Foundation? Let us delve into the Warner-Lambert archives, for the Foundation is a memorial to the industry, persistence, and integrity of the founders of the organisation. Through decades rich in achievement and crowded with change, and filled with excitement as discovery after dramatic discovery altered the face of the old-fashioned drug business.

A Story of Ideas

This great Warner-Lambert organisation is justly proud of its history of achievement, and as befits an undertaking of its magnitude, it has very complete records of its development through a century. These records show that the Warner business is really a story of ideas, all of which were born in a drug store.

Ideas, born humbly in small drug stores at different periods in the last century and in different cities, but each the product of a fertile imagination, have together grown to encircle the globe. Thus you can measure their growth in terms of distance. Or, you can measure it in terms of contrast.

And into that comes the Australian preamble to our story of the evolution of this great organisation, which by a unique gift has strengthened its friendly relationship with Australian pharmacy.

The Australian Set-up

The Australian subsidiaries of Warner-Lambert, U.S.A., have also reorganised their corporate set-up during the last few months. This reorganisation has involved the voluntary liquidation of three companies with well-known names. However, these names have been transferred to other companies in the final set-up.

The reorganisation is now completed and the new streamlined structure is headed by Warner-Lambert Pty. Ltd. (paid-up capital £750,000), which owns three subsidiary companies named William R. Warner & Co. Pty. Ltd. (ethical preparations), Richard Hudnut Pty. Ltd. (cosmetics and toilet preparations) and Chamberlain's Pty. Ltd. (advertised proprietaries, including Listerine).

The company's Australian business has expanded greatly in post-war years. Future prospects are bright, and management is confident of continued success.



Mr. William B. Howard, Managing Director,
Warner-Lambert Pty. Ltd. (Aust).

Enter William R. Warner

In 1856, a young pharmacist named Warner, rolling pills in a drug store in Philadelphia, mused over the notion of coating pills with sugar. In that way they could be made more pleasant to take. Then, perhaps, people would be more willing to swallow them. Then, if a man could bring out new pills—in addition to the ones the doctors prescribed—perhaps the pill business could be expanded to a wholesale scale and maybe its products could be sold all over the city.

It's a far cry from the day when the young pharmacist rolled his own pills in his drug store and dreamed of better products. Today, in the company's offices, laboratories and production departments, there are specialists trained by the finest scientific schools here and abroad, and every conceivable type of equipment necessary to carry on the most exacting work—high-powered microscopes, and apothecary's and analytical balances so sensitive that any one of them will weigh a pencil mark on a slip of paper. A control laboratory continually works to check production of every preparation so that the high standards of Warner quality can be maintained.

One Hundred Years Ago

Yes, a great, thoroughly modern, scientific organisation bears the Warner name today, but it traces its origin back nearly one hundred years, to the time when William R. Warner, newly graduated from the Philadelphia College of Pharmacy, started out on a lecture tour through Pennsylvania—a one-man expedition on which he explained to gaping audiences such phenomena as the combustion of gases and the new anaesthetic known as "laughing gas."

He had an inquiring mind which early directed his thoughts to pharmaceutical elegance. He had come to be regarded as a person likely to "go places," for at 18 he had been corresponding, learnedly, on matters of natural science with such eminent authorities as Louis

Agassiz, of Harvard, and Spencer Baird, of the Smithsonian Institution in Washington.

Back from his lecture tour, in 1856, he launched himself in business by opening a drug store at the corner of Philadelphia's Second Street and Girard Avenue.

The drug store prospered. Indeed, it prospered so well that after 10 years its young proprietor branched out into manufacturing and wholesaling. Now came forth, in reality, the patented, sugar-coated pill; and its advent marked a tremendous step toward the pharmaceutical elegance we know today. From the diminutive Warner plant also came the standard tinctures and elixirs that, arrayed in massive, gold-labelled bottles, brightened druggists' shelves. Meanwhile, William Warner found time to help to revise that bible of pharmacy, the United States Pharmacopoeia.

Retail Drug-Store Phase

Still the business grew. In 1876 it moved into a six-storey building in Market street. With a sharp eye to business, Mr. Warner stocked and equipped the building's ground floor as a retail drug store. Eighteen-seventy-six was the year of Philadelphia's Centennial Exposition, an event that brought to the city visitors from all over America. Of these, many visited Warner's new and centrally situated drug store—and carried back to their home communities tales of a business enterprise that, to many of them, was as different and as interesting as any of the exhibits they had seen on the exposition grounds.

Widely the Warner name became known, and the business was on its way toward living up to its founder's motto, *Omnis orbis*—"the whole world."

Ten years later, leaving the retail store and the general office behind, the manufacturing end of the business moved into its own new building at 649 North Broad street. This edifice, representing the best of construction for the time, was equipped, according to contemporary account, with "passenger and freight elevators, boilers for generating steam, and an engine and dynamo for the incandescent system of lighting installed throughout." The building became known as Warner Hall.

Here was produced—again according to contemporary account—an increasingly wide variety of "elixirs, syrups, lozenges and medicinal wines, in which the disagreeable taste of certain medicines had been successfully destroyed by very ingenious processes and without in any way injuring the active principles."

In 1899 a disastrous fire that destroyed a whole block of buildings on Market street, wiped out the Warner retail store, and, possibly regarding the event as an omen, William Warner moved his general offices to Warner Hall and went out of the retail business for ever.

Meanwhile the head of the business travelled widely. In London, for the promotion and sale of his products in England and India, he established an association with the firm of Francis Newberry & Sons Ltd. In the United States he opened sales offices in New York and Chicago.

A pioneer in the development of the coated pill, William Warner pioneered also introducing drug preparations to physicians and in advertising in medical journals. In 1888 he published the first edition of "Warner's Therapeutic Reference Book," a substantial addition to many a medical practitioner's then meagre library. Between one pair of covers it offered a medical formulary, a section on weights and measures, a list of poisons and their antidotes, a table of medical dosages and—to carry the matter on through to a conclusion—a manual of instructions for performing post-mortem examinations.

The Pfeiffer Brothers

In 1901 William Richard Warner died, and control of the business passed to the oldest of his three sons,

William R. Warner, Jnr., who operated the company until 1908.

And now we come to the name Pfeiffer, the founder of the Pfeiffer Foundation. In 1908 the company's assets and property were purchased by two brothers, Henry and Gustavus A. Pfeiffer, who, in St. Louis, had established and developed a flourishing drug business of their own. Thus the energies of two vigorous enterprises, one in the East and the other in the Middle West, were joined in a common cause.

The oldest of 10 children in a farming family, Henry Pfeiffer had entered the world of business as a hired hand in a flour mill in Cedar Falls, Iowa. Soon, having found the milling industry too dusty to suit him, he apprenticed himself to the proprietor of a Cedar Falls drug store. At the end of three years he acquired his state certificate entitling him to fill prescriptions and to operate a drug store of his own, and when his boss decided to move farther west into newly opened territory, Henry Pfeiffer, with a down payment provided by his father—who mortgaged his farm to raise the cash—and with the balance "on time," took over the business.

Ten years of retailing and Henry Pfeiffer moved on into manufacturing. Having sold the store in Cedar Falls, he transferred his operations to St. Louis and joined a partnership to establish the Allan, Pfeiffer Chemical Company.

Meanwhile, the younger brother, Gustavus, was attending pharmacy school in Chicago. To the younger brother, the elder wrote: "Come on down here and help us manufacture. We'll pay you \$20 a week."

Twenty dollars a week! In those days that much money was a fortune. Gustavus Pfeiffer quit school and joined his elder brother in St. Louis. And thus began a fraternal association in business that was to last through the years.

Pfeiffer Chemical Company

In 1900 Henry Pfeiffer sold his interest in the partnership of the Allan, Pfeiffer Chemical Company and, a year later, with his brothers Gustavus and Paul as partners, formed the Pfeiffer Chemical Company. Later, Paul retired from the organisation.

Although it started from small beginnings, the Pfeiffer Chemical Company grew and prospered.

In 1908, we have seen, through the purchase by the Pfeiffer brothers of the Warner Company's assets and property, the houses of Pfeiffer and Warner joined forces, and the Pfeiffer brothers transferred their base of operations from St. Louis to the Warner headquarters in Philadelphia.

By a division of labours, Henry Pfeiffer devoted himself mainly to directing the company's domestic business and Gustavus to the development of export.

In 1916 the company's general offices, laboratories and manufacturing facilities in Philadelphia were moved to New York City, and the former Pfeiffer plant in St. Louis was enlarged.

Finally, to supplement its operations in New York, in 1940 the company established a plant in nearby Mamaroneck. This plant, originally designed for "pilot" operations—that is, for testing procedures between test-tube and full-stage production—now is a full-fledged production unit.

Meanwhile, over the years, the Warner Company has acquired a number of affiliates, among them the following: In 1914 Richard Hudnut, in 1916 the Dr. Earl S. Sloan interests, in 1929 the Waterbury Chemical Company, in 1930 the Nonspi Company, the Chamberlain Medicine Company, and Schering and Glatz, Inc., in 1932 the Vince Laboratories, and in 1935 the Marcy Laboratories, Inc. More recently there was a marriage with Chilcott Laboratories—little known abroad, but prominently established in U.S.A.—and this year the merger with Lambert Pharmacal took place.

Until his death in 1938, Henry Pfeiffer served as the company's president. He was succeeded by his brother, Gustavus, who for a number of years had been general manager.

Warner Institute

It was under Gustavus Pfeiffer's guidance that, in 1938, the company initiated an important endeavour. To enhance the organisation's service to humanity, there was established at headquarters in New York the Warner Institute for Therapeutic Research, and facilities were expanded and the scientific staff was enlarged to conduct research in chemistry, pharmacology, toxicology, pathology, biochemistry, bacteriology, nutrition and pharmacy. To expand still further the scope of the Institute's research, the management established research fellowships in other scientific institutions and in hospitals, and scholarships in medical colleges.

Consistent with such high ideals, the will of Gustavus Pfeiffer left approximately 87,000 dollars each to the City College of New York School of Pharmacy, Philadelphia College of Pharmacy and St. Louis College of Pharmacy. The remaining 10 million dollars from his estate went to the Gustavus and Louise Pfeiffer Research Foundation, and from this great endowment the Australian Guild Scholarship has become possible. Money provided for research and charitable purposes from the estates of both Henry and Gustavus Pfeiffer totals almost 40 million dollars.

In December, 1945, Gustavus Pfeiffer enlisted in the business the services of others; and he was succeeded, as president and director, by a friend of long standing, Elmer H. Bobst. The two had met in 1912, when Mr. Bobst was selling chemicals.

Before coming to the post of executive head of the enterprises, Mr. Bobst had recently retired from active participation in the business of Hoffmann-La Roche & Co., of Nutley, New Jersey, of which he was president and general manager. In his thirty years of association with Hoffmann-La Roche he had achieved a remarkable record as a forward-looking executive, salesman and pharmaceutical expert.

Upon assuming the direction of William R. Warner & Co., Mr. Bobst announced that his immediate objectives would be the further broadening of the scope of the Warner Institute in developing new remedies, the improving of existing medicinal preparations, and the advancing of an extensive programme for the pooling of pharmaceutical research by pharmaceutical and chemical manufacturing concerns in the United States and abroad. Now Chairman of Warner-Lambert, Elmer Bobst also is head of the Pfeiffer Foundation.

Last year, Mr. Bobst persuaded Governor Alfred E. Driscoll, of New Jersey, to join forces and become president of Warner-Lambert. Following an outstanding career as a lawyer and Chief Executive of his State, Gov. Driscoll's decision to return to private life following a brilliant gubernatorial record has added great strength to the top management of this business. He is now firmly in charge of Warner-Lambert operations, leaving Mr. Bobst free for policy matters.

Meanwhile, over the years, William Richard Warner's two-word motto, *omnis orbi*, has come to express itself in operations truly world-wide. Starting in England, with the association with Francis Newberry & Sons Ltd., the company's export business, particularly under the guidance of Gustavus Pfeiffer, expanded rapidly, and this expansion led to the establishing of company-owned branches and manufacturing plants in England and in other countries. At the outbreak of World War II, these branches, scattered around the globe, numbered twenty-one, and at the end of the war, fourteen remained. In addition, in countries in which the company does not operate branches, export sales are managed by special agents to the number of seventy.



Pharmacology for Pharmacy

By F. H. Shaw, M.Sc., Ph.D.(Lond.), Professor of Pharmacology, University of Melbourne.

Tenth Article

ANTIBIOTICS

Contrary to general opinion, penicillin was not the first antibiotic to be introduced into medicine. Tyrothricin was actually prepared and tested by Dubos in 1939. It proved to be too toxic for general use. Certainly the original idea goes back to Fleming, and we owe the introduction of a harmless and efficacious antibiotic to the hard work of Florey and Chain.

To tell of the bacteria affected and diseases treated by the now numerous antibiotics requires a knowledge of microbiology. We can say, however, that not all bacteria are killed by each agent. Rather each antibiotic harms a certain group of bacteria. At the present time the goal is to find a substance which will destroy as many species of bacteria as possible—the so-called broad spectrum antibiotic.

Before 1932 it was generally taught that bacterial diseases were not susceptible to chemotherapy. The advent of the sulphonamides changed this thought completely. Up to this time only a few larger organisms such as spirochaetes, the causal organisms of syphilis or the plasmodia of malaria succumbed to chemical attack. In most instances chemotherapy was of more importance in the tropics than in the temperate zones. Bacterial or virus diseases were tackled by immunological means, e.g., vaccination for smallpox, antitoxin for tetanus or diphtheria. These methods had their limitations. Active immunity decayed with time, usually over a few years. Passive immunity even faster. Administration of antitoxin was not always successful if the organisms had thoroughly established themselves. The Salk antipoliomyelitis vaccine suffers from the same disadvantages.

Penicillin: This substance has been described as the "queen of drugs." It is the most satisfactory therapeutic weapon known in that it does its particular task with utmost efficacy and negligible harm. It has been said to be a drug "without a pharmacology." The latter is certainly not true. Problems of administration, rapid clearance from the body, allergies and mode of action constitute its pharmacology. In contrast to the profound actions on susceptible bacteria, the cells of man are, in general, unaffected by penicillin. Except for toxic effects of penicillin in spinal fluid, either clinical doses or excessive doses are without characteristic actions on the organ systems of animals or man. The only notable exception—and this is, in a sense, roundabout—is allergic sensitization. Here penicillin does not exert any direct toxic effect, but by sensitizing the patient it may render him subject to urticaria or other allergic manifestations. Fortunately, these seldom threaten life. It is this complete selectivity of action between bacteria and the host which makes penicillin the unique drug it is. All cells are quite similar in derivation and basic structure, and yet chemotherapy in even the broadest sense depends upon subtle differences in reaction. An agent may compete with a common metabolite and in this manner harm a bacterial cell; if it also harms the host cell—and this it is likely to do—no advantage is gained. It is only when the host cell does not or need not use the metabolite that discrepant or selective action is possible. This may be because simpler building blocks suffice on the one extreme, or because only more complex ones can be

used on the other; or again, by-passing routes may be possible in the more complicated cell that are impossible in the simpler parasite. At any rate, this perfection of selectivity, sought after by all workers in chemotherapy, reaches its peak with penicillin.

The problem of administration has been dealt with in an earlier article. It is unfortunate that penicillin is rapidly eliminated from the body by the kidneys. At one time a substance caronamide, was developed which competed with penicillin for excretion by the tubules of the kidney. The introduction of procaine penicillin rendered this method of conservation obsolete. Untoward reactions of allergic nature are not uncommon from penicillin. Fortunately these are seldom serious and usually involve only the skin. The following manifestations have been described: Local reactions after intramuscular injections of repository penicillin; general reactions after all types of systemic administration, including urticaria, serum sickness and exfoliative dermatitis. Contact sensitivity is seen after topical applications of penicillin to the skin or following the use of ophthalmic ointments. The incidence of reactions is highest with topical applications, as high as 10 per cent.; aerosol inhalation may cause reactions in about 3 per cent. of the patients. Intramuscular injection is much less troublesome and gives reactions in less than 1 per cent. Oral administration produces still less harm. When reactions do appear, antihistaminics often control the symptoms adequately. There has been some success in the production of less sensitizing preparations of penicillin. The penicillin salt of 1,2-diphenyl-2-methyl-aminoethanol is tolerated by most patients sensitive to procaine penicillin; another, the biosynthetic penicillin O, can be given without reaction to most patients sensitive to penicillin G.

Penicillin is used with effect in pneumonia; infections of the mastoid middle ear and tonsils, boils and carbuncles. Meningitis may also be treated, although penicillin does not penetrate through the "blood brain barrier" as well as the sulphonamides. Gonorrhea responds readily to penicillin, but the signs of an accompanying syphilis may be masked. A serologic blood test for syphilis should always be carried out at the same time.

Undoubtedly the gravest disadvantage of the use of antibiotics is the development of a resistance to them by the organisms. With penicillin this is not as serious as with some other substances. It is most serious with organisms known as staphylococci (in abscesses, carbuncles and wounds). In certain hospitals resistant staphylococci are becoming a problem. These organisms, entering a wound, are difficult to eradicate. At present the resistance of organisms to penicillin is receiving a great deal of scare propaganda. One wonders if, on reflection, some of this alarm will be seen to have been unnecessary. Not all organisms show that penchant for resistance which is manifested by the staphylococci. New broad spectrum antibiotics also alter the picture.

The discovery of penicillin was quickly followed by that of **streptomycin**. In general streptomycin is active against bacteria not affected by penicillin, in particular the tubercle bacillus. Streptomycin suffers from the grave disadvantage that organisms readily become re-

PFEIFFER TRAVELLING SCHOLARSHIPS 1956-1959

The Federal Council of the Guild has very great pleasure in announcing that the Pfeiffer Research Foundation have donated \$3,375 (about £A1,500) per year for a period of four years, to provide travelling scholarships to the United States of America.

(The Gustavus and Louise Pfeiffer Research Foundation was established by a former president of William R. Warner & Co., now part of Warner-Lambert Pharmaceutical Co. of U.S.A. Their Australian subsidiary is Warner-Lambert Pty. Ltd., of Sydney, which is the parent Company of William R. Warner & Co. Pty. Ltd. (ethical preparations); Richard Hudnut Pty. Ltd. (cosmetic and toilet preparations), and Chamberlain's Pty. Ltd. (advertised proprietaries, including Listerine)—all well known to pharmaceutical chemists of Australia.)

The first of these scholarships will be awarded in 1956.

OBJECT OF SCHOLARSHIP: The object of the scholarship is to train young Australian pharmacists for future positions of leadership within the profession by extending to them at a young age the opportunities of overseas experience and study.

CONDITIONS OF THE PFEIFFER SCHOLARSHIPS

1. The applicant must:—

- (i) be a graduate of an Australian Pharmacy Department and a registered Pharmaceutical Chemist.
- (ii) be preferably not more than 30 years of age on 31st December of the year in which the scholarship is awarded.
- (iii) submit to the Federal Council an outline of a proposed project, supported by evidence of the applicant's ability to carry it out.
- (iv) submit the names of two suitable referees.

2. The project submitted must impinge upon one or more of the following categories:—

- (i) Teaching.
- (ii) Advanced Studies.
- (iii) Higher Degrees.
- (iv) Research.
- (v) A study of the methods and conditions of pharmaceutical practice in any of its aspects, such as Retail, Wholesale, Hospital, Manufacturing, National Health; and may include such aspects of practice as organisation, merchandising, display and advertising.

(It would be necessary in some instances for the

successful applicant to visit different centres in the United States.)

3. The successful applicant will be required:—

- (i) To reside in the United States of America for not less than ten months.
- (ii) To submit to the Federal Council periodic reports on his work at intervals to be agreed upon; and a detailed report after the expiration of the scholarship.
- (iii) By arrangement with the Federal Council to deliver, if so required, a series of lectures or addresses on his work in America in two or more States of the Commonwealth.
- (iv) To give an undertaking that he will return to Australia and remain in active association with Pharmacy for at least two years after expiry of the scholarship.

4. Applications should be addressed to the Federal Secretary, the Federated Pharmaceutical Service Guild of Australia, 18/22 St. Francis Street, Melbourne, Victoria.

5. The latest date for lodgement of applications for the 1956 scholarship will be 31st March, 1956.

Notwithstanding the foregoing requirements, the Federal Council may in its discretion consider applicants whose qualifications are not altogether as outlined above.

The award may be terminated at any time by the Federal Council, if there is a good reason.

The Federal Council may vary the conditions of the award, if it so desires, from time to time.

SALICYLATES

LACTATES

HOWARDS OF ILFORD

IRON SALTS

POTASSIUM ACETATE

IODIDES

HEAVY MAGNESIAS

ESTABLISHED 1797

Fine Chemicals of standard purity made under strictest analytical control

Even in standard lines like these, there is a special 'know-how' in the selection of raw materials, in the processing of products and in the storing and packing of the finished article. The experience Howards have gathered during 150 years in the trade is entirely at the service of their customers.



CALCIUM GLUCONATE · CALCIUM LAEVULINATE · ROCHELLE SALTS · QUININE · BROMIDES
CITRATES · SODIUM ACETATE · ZINC SULPHATE · FERROUS GLUCONATE · SORBITOL · TABLETS
HOWARDS OF ILFORD LIMITED ILFORD · NEAR LONDON

row/1A

sistant to it. To overcome this disadvantage, to obtain enhanced therapeutic effects and decreased toxicity combinations of this drug with other antibacterial agents have been extensively explored experimentally and clinically. At present there are two available procedures to reduce the rate of emergence of resistant strains of *M. tuberculosis*. A therapeutic regimen in which streptomycin is administered every third day instead of daily appears to be as effective as a more intensive schedule in the treatment of certain types of tuberculosis. This procedure definitely retards the rate of emergence of resistant cultures. Of still greater importance is the use of drug combinations. There is a growing number of chemical agents which are capable of exerting a tuberculostatic action. Para-aminosalicylic acid (PAS) and isoniazid may be taken as outstanding examples. These drugs apparently exert their bacteriostatic action by mechanisms entirely different from streptomycin. Therefore, strains of organisms that are resistant to streptomycin retain their sensitivity to PAS or isoniazid, and vice versa. By the concomitant use of two or more drugs, one succeeds in preventing the multiplication of organisms that are resistant to any one drug. It is also unfortunate that streptomycin causes a number of untoward phenomena, particularly injury to the nervous system and hypersensitivity reactions. The decision to employ protracted streptomycin therapy, as in tuberculosis, should be made only with the knowledge of the risk involved and only when one can exert appropriate laboratory and clinical control in order to mitigate the danger. The incidence of toxic manifestations is directly proportional to the size of the daily dose and to the duration of therapy. The main danger in the chronic use of streptomycin is damage to one of the main nerves of the brain stem. This results in giddiness and, less frequently, deafness. Patients who are to receive long-term medication with the streptomycins should have preliminary audiometric and labyrinthine tests, which should then be repeated at monthly intervals during the course of treatment.

Dihydrostreptomycin was introduced as a less toxic derivative. This is true of the giddiness produced, but the auditory damage is more severe.

Apart from other dangers, the use of streptomycin and its helpers (PAS, etc.) has revolutionised the treatment of the tuberculosis. We may well envisage the disappearance of T.B. as we have the virtual elimination of diphtheria.

The term **tetracycline** is used generically for two antibiotics which we know commonly as **aureomycin** (chlortetracycline) and **terramycin** (oxytetracycline). The tetracyclines reach down to attack submicroscopic organisms—the viruses. In addition they possess a wide range of activity which overlaps the spectra of penicillin and streptomycin. They are effective against certain Rickettsiae (organisms between a virus and a bacteria) which cause such diseases as typhus, scrub typhus and Q fever. Psittacosis, a viral disease, yields to these drugs. Amongst the bacteria most susceptible are haemolytic streptococci (sore throats and "blood poisoning"), pneumococci and gonococci. Decided advantages of these drugs are oral efficacy, relatively low toxicity, and wide range of antimicrobial activity. A definite disadvantage is their currently high cost. The possibility of obtaining enhanced therapeutic effects by combining the tetracyclines with other antibiotics or sulfonamides is a subject of continuing investigation. Untoward effects during therapy with the tetracyclines are usually mild, but serious reactions may occur. The most frequent complaints are referable to the gastrointestinal tract and mucous membranes. The incidence of mild but troublesome nausea, vomiting and epigastric distress and of serious and sometimes fatal staphylococcal gastroenteritis and other superinfections is related to tetracycline dosage and hence subject to some control. The pattern of untoward reactions is similar for the two congeners, but their incidence appears

to differ significantly. Gastrointestinal side effects, including diarrhoea, are most frequent in patients receiving oxytetracycline. If troublesome, gastric distress can be controlled by administration of the tetracyclines with milk or at meal time, by sedatives or by concomitant ingestion of antacids. Nausea and vomiting often subside as medication continues, and can frequently be controlled by temporary reduction in the dose or by administration of smaller amounts at more frequent intervals.

Chloramphenicol (chloromycetin) when first introduced in 1948, was particularly valuable for typhoid and typhus fever and urinary tract infections. Unfortunately, by 1950, it had become evident that this antibiotic could cause serious and fatal aplastic anaemia, etc. Although these cases only amounted to about 1:100,000, it was advised, correctly, that this substance be used only for the treatment of typhoid fever.

Erythromycin is the latest arrival among the orally effective broad spectrum antibiotics. It has been used successfully in the treatment of pneumonia, meningitis, blood poisoning and wound infections.

Polymyxin has a rather toxic effect on the kidneys and is more usually employed topically (likewise neomycin and bacitracin).

In the next article we shall see how the status of the sulphonamides has altered with the introduction of the antibiotics.

LABOUR PAINS

This week at our hospital the builders are working with all their paraphernalia down to pneumatic drills, directly over the theatre. This has somewhat confused the Thoracic Surgeon, whose decibel output as he split a sternum almost equalled theirs. But the builders got in first. They sent down a message asking if he could make less noise.

—"In England Now," "The Lancet," October 8, 1955.

Classified Advertisements

The charge for these Advertisements is 3/- per line, with a minimum of 9/-, payable in advance.

WANTED TO PURCHASE, Chemists' Unsaleable Stock, Patents and Sundries, Obsolete or Damaged. Small or large quantity. Phone LM 2333. Postal Address: J. Males, 13 Gelding Street, Dulwich Hill, Sydney.

SURFERS' PARADISE, QUEENSLAND

Modern self-contained apartments for two people, in heart of Surfers' Paradise, opp. hotel and 200 yards from beach, on Pacific Highway. From £9/9/- per week. Inquiries to D. J. McNamara, Pacific Highway, Surfers' Paradise.

NORTHERN VICTORIAN PHARMACY FOR SALE.

Turnover £6500, and increasing. Dwelling attached. Rent £2/8/3 weekly, house and shop. Lease if desired. Price, inc. stock £1100, £1950. Finance arranged. Replies to "No. 11255," c/o "A.J.P." Office, 18 St. Francis St., Melbourne.

ROYAL CHILDREN'S HOSPITAL, MELBOURNE.

QUALIFIED PHARMACIST, FEMALE, required. Bright, modern pharmacy. Full experience in all types of work, including sterile.

Apply Chief Pharmacist, Royal Children's Hospital, Carlton, Melbourne.

The System of District Pharmacies in Sweden

By G. Källrot (Sweden)

(Summary of a paper read at the 16th General Assembly, F.I.P., London, 1955.)

Sweden now has 415 self-dependent pharmacies, the owners of which, for some years, have been organised in *Apotekarsocieteten*. There is strict government control, both of the activity and of the economics of the pharmacies. The tariffs which determine the prices of the medicines are fixed by the Government, as also is the owner's income. This levelling of incomes means that the pharmacies which make a better profit subsidise those that are less profitable. This is necessary as the Government also decides where the pharmacies shall be situated; thus a site can never be chosen on economic grounds.

The owners contribute to a common pool from which is paid approximately 60 per cent. of the wages. Since the total amount of money in this pool fluctuates, it acts as a buffer. This intermingling of the economics of all pharmacies makes it justifiable to speak of a collective system of Swedish pharmacies. Within this economic collective system the single pharmacy acts as a self-dependent unit. Until the early forties it also attended independently to all duties that were incumbent upon the pharmacies. About that time there was a revival of interest in the work in the pharmacy laboratory. As a result a tablet machine was added to the equipment in many retail pharmacies, and a brisk industry was established for the production of tablets, sugar-coated tablets, injectables and all preparations which could be manufactured with the apparatus available.

In 1939 *Apotekarsocieteten* started a central laboratory (A.C.O.) to give a helping hand to the manufacturing industry in the pharmacies. Its most important task was to organise the control of the products manufactured, so that the quality of the "pharmacy produced" goods could be warranted faultless. A special trade mark was therefore registered and certain requirements laid down to govern its use. Since 1923 *Apotekarsocieteten* has had another central laboratory (A.K.L.), whose task primarily is to undertake analyses which cannot be performed in the pharmacies.

The manufacturing programme was a heavy one. More than 1000 items were on the list. The biggest pharmacies managed to maintain a fairly good production but the small ones were hard put to find the necessary time and soon began to buy some articles from neighbouring bigger pharmacies.

Adoption of the Plan

In 1946, the plan for the so-called district-pharmacies was adopted by *Apotekarsocieteten* to be put into immediate effect. The 415 pharmacies, which are generally dispersed in relation to population density, were divided into 25 districts. The underlying principles were to elect so many pharmacies with appropriate resources that they, without further investment, should be able to furnish the neighbouring pharmacies with the goods which the latter had previously manufactured in their own laboratories.

The preparations which the pharmacies at first bought with advantage from their district pharmacies were extracts, injectables and tablets. According to the regulations the pharmacies themselves had to make all preparations which were included in the pharmacopoeia. This, however, was especially expensive in the case of extracts. Although the equipment necessary for preparing injectables in small batches is not so expensive, the pharmacies found it necessary to have

the preparation under strict analytical control and, where small batches were concerned, this was not practicable. The equipment for tablet making is fairly simple and not so expensive. There were also many pharmacies which had tablet machines and had manufactured most of the tablets they had sold. It became increasingly obvious, however, that the production of small batches was uneconomic, especially when they had to be analytically controlled.

In 1946 the 25 district pharmacies acted as self-dependent units on the manufacturing side. Many common problems were handed over to the central laboratories. A.C.O. had been made responsible for organisation matters and it began to collect statistics relating to different phases of the pharmacies' activities. This proved most interesting, for over a long period the Swedish pharmacies had collected statistics on many of their activities and dealings, especially on what they had produced in their laboratories. Collation of these statistics provided an excellent means of fixing the amount of work which could be handed over to the district pharmacies.

The next logical step was to centralise production among the district pharmacies. More than 500 items on the production list were accordingly centralised with one manufacturing district pharmacy and this made it possible to execute analytical control on every batch at the lowest possible cost. With regard to analytical control, quite naturally A.K.L. obtained the key position. The job is performed in two ways: centralised control at A.K.L., and peripheral control by the individual manufacturer. The centralised control is used whenever it is necessary to use complicated apparatus or if the analyses are especially difficult. Research is continually going on to simplify the analytical methods. As a result, there is a tendency to replace central analysis at A.K.L. by decentralised analysis at the district pharmacies.

Purchasing and Equipment

Soon after the central organisation began to function it was found necessary to centralise the purchase of materials to the district pharmacies. The conditions for such an organisation were very good. The current statistics indicated what quantities were necessary, and it was also possible to extrapolate the requirements where the use of a product was increasing or decreasing. The problem of distribution was accordingly solved by establishing a co-operative association in which the district pharmacies were shareholders.

The equipment now available in the district pharmacies differs in no way from that used for the same tasks in the pharmaceutical industry. The main products are tablets and sugar-coated tablets. Rotary tablet machines are used and the mixing apparatus usually has a capacity of 500 litres which determine the size of batches. In 1949, 70 per cent. of the tablets were manufactured in batches below 100,000 per batch. In 1953, only 15 per cent. were manufactured in batches of less than 100,000.

The constant increase in turnover at all pharmacies and the still more rapid increase in turnover at the district pharmacies have now and then given rise to the question of enlarging the premises, especially for the manufacturing industry in the district pharmacies. If a district pharmacy does not have the necessary capacity in equipment, it is considered whether other district pharmacies can take over. In some cases it has

Fresh fields of endeavour...



At St. Ives, Huntingdon, the Ransom organisation adds steadily to its store of knowledge in the growing of drugs. Here, on the Company's 500-acre farm, fresh territory is being opened for research and experimental purposes, with the aim of developing new strains of medicinal plants and of evolving still more efficient methods of cultivation. Despite the use of synthetic drugs in medicine today, the world-wide demand for Ransom's drugs and galenicals continues to grow. So also does the capacity of the Company's production plant at Hitchin. Whenever your manufacturing requirements call for drugs and galenicals, ask Ransoms for samples and quotations.

EXTRACTS : TINCTURES : ESSENTIAL OILS : RESINS : CHLOROPHYLL

Actual Growers of

BELLADONNA : HENBANE : FOXGLOVE : PEPPERMINT : LAVENDER

Established 1846



Enquiries are invited direct or
through our representatives:

H. W. Woods (Pty.) Ltd., 308 Flinders Lane, Melbourne, C.1, Victoria.
Woods & Woods, Hardy's Chambers, 5 Hunter Street, Sydney.

WILLIAM RANSOM & SON LTD.
Hitchin Hertfordshire England

FOR YOUR CUSTOMERS

who are THICK and tired of it . . .



RECOMMEND



Supplied in Packets
containing 24 Wafers

melozets

Trade Mark

METHYLCELLULOSE WAFERS—A PLEASANT FORM
OF TREATMENT FOR OVERWEIGHT

AVAILABLE NOW FROM YOUR REGULAR WHOLESALER

MERCK & CO. Inc.
FAIRFIELD, N.S.W.

been proved advantageous and necessary to move the a normal return on the investment in the necessary manufacturing apparatus a search is made to find a manufacturer who has the equipment. An agreement may then be made either to hire the apparatus or to have the product supplied ready-made. Examples are fruit juices and capsules. Each district pharmacy keeps whole or parts of the manufacturing section of a district pharmacy to localities outside the "mother pharmacy." If the total demand for an article is too low to guarantee a comprehensive stock. Experience has shown that in the beginning the pharmacies often bought from several district pharmacies, but that they have tended more and more to confine their purchases to their own district pharmacy, according to the plan. Distribution is thus fairly uncomplicated.

It soon became apparent that many pharmacies wished to repack the preparations obtained from the district pharmacies, and for long it was accepted as a matter of course that it would be of advantage to all parties concerned if in general the packaging could be done in connection with the manufacturing. The advantage of buying ready-made packings has become more and more apparent. This has especially been the case since an economic incentive to buy such packs was created, i.e., a reduced price was quoted for so-called transport packs containing 5 to 10 single packings. A very important factor in all these questions concerning pharmaceutical manufacturing, in either the single or the district pharmacies, is the price. Until this year prices were based on out-of-date principles. But from 1955, they will be adjusted in such a way as to reflect costs.

Statistics show that a little more than half of the turnover is made up of specialties from the pharmaceutical industry. The other half consists mainly of articles prepared and manufactured by the pharmacies themselves. The doctors' individual prescriptions cannot be centralised. The same applies to uncomplicated articles, such as many cough mixtures, which the single pharmacies can prepare with their available equipment and staff. At present it seems that some 20 per cent. of the pharmacies' turnover could advantageously emanate from the district pharmacies. About two-thirds of that amount has been reached.

Economic Considerations

The system of district pharmacies is wholly built upon the pharmacies' free will; therefore it was quite natural and understandable that reception of the new idea was not instantaneously wholehearted. Taking this into account, however, I think it can rightly be said that the progress has been rapid. The turnover of the district pharmacies has quadrupled between 1946 and 1953. An individual pharmacy makes use of its district pharmacy because it finds it an advantage to do so. It is understandable that the Swedish collective system of pharmacies which tends to level the economic results is not apt to give the individual pharmacy a clear or direct concept of its costs. It is also hard to evade a certain discrepancy between the interest of the single unit and the collective.

In these circumstances it is very important to give incentives to use the right alternatives. This is the more important as the economic climate for the Swedish pharmacy-owners is somewhat severe as regards price fixing by the authorities and rules for calculating the income. Such an incentive has now been given since the district pharmacies return a part of their profit to the pharmacies in their districts. This is made as a bonus calculated on the proportion between the turnover of a single pharmacy and its purchases at its district pharmacy. The smaller pharmacies do not usually have the same manufacturing facilities as the larger ones and accordingly buy proportionally more from their district pharmacies. It is then considered only right that these small firms should also get a better bonus.

Our experiences of the operating of the district pharmacies can be summarised as follows:—

(1) The resources of the best-equipped pharmacies and the central laboratories A.C.O. and A.K.L. have been made available to all pharmacies. The public gets the same service and has the same choice of products in a small pharmacy as in a big one.

(2) Analytical control is applied to pharmacy-manufactured articles.

(3) Manufacturing costs have been considerably lowered.

(4) By centralising manufacturing at the district pharmacies, it has been possible to buy raw materials and other essentials at the lowest possible prices.

(5) It is now possible to curtail expense; investments in premises and equipment can be more limited and the staff much better disposed.

—Reprinted from "The Pharmaceutical Journal."

OLD-TIME DRUG JARS

Drug or specie jars, once a prominent feature of the chemist's shop, like the carbon, are rapidly becoming obsolete—forgotten symbols and ornaments of a by-gone era.

Work of great beauty, involving skilled handicraft went into the making of these signs of the pharmaceutical chemist of old. When time passed more leisurely. Two ancient drug jars recently came into possession of the Victorian College of Pharmacy, and are now in the Council Chamber of the College. A photograph of these is printed herewith.

Concerning these jars, Mr. L. J. Skinner, Export Sales Manager of S. Maw & Sons Ltd., Aldersgate House, Barnet, England, writes:

"Drug jars similar to those illustrated were painted until the First World War by Mr. Sharpley of Maw's, who was the last man in Britain to practice this delicate



art. The decorations ranged from the imperial arms of Germany and Russia, to the coat of arms of the Pharmaceutical Society of Great Britain, and were painted by placing the hand inside the jar and working in reverse. Mr. Sharpley began to train his son in his craft, but the young man succumbed to modern developments and entered the motor industry in 1918.

"Jars bearing the name S. Maw & Son and Thompson were painted between 1890 and 1900, during which decade the company was known by that name.

"The last occasion when these jars appeared in our catalogue was in 1913, when they varied in price between 50/- and 120/-, according to size, 'any decoration painted to order'.

"The company, now approaching its hundred and fiftieth year of service to chemists, is still proud to exhibit at its London showroom some half dozen decorated drug jars of previous eras."

Proprietary Medicines — A Survey

Report Presented at the Branch Representatives' Meeting, British Pharmaceutical Conference, Aberdeen, August 31, 1955.

The first instalment, a Historical Survey, by H. E. Chapman, M.P.S., appeared in our September issue. In our November issue we published "A Manufacturer's View," by H. Treves Brown, B.Sc., F.P.S., and this month "A Retailer's View," by J. C. Bloomfield, M.P.S., concludes the survey.

A Retailer's View

By J. C. Bloomfield, M.P.S.

Mr. Chapman has already stated that proprietary medicines can be conveniently classified into two groups:

- (a) Those which are advertised directly to the public — counter specialties, and
- (b) Those whose sale is promoted only by advertising to the medical and allied professions — "ethical" proprietaries.

My task is to deal with both groups in their present-day application to the conduct of retail pharmacy, and I propose to take them in sequence and to deal with the advertised proprietaries first.

Advertised Proprietary Medicines

Mr. Chapman has given figures for the sales of advertised proprietary medicines over the past few years, and these show that they have remained fairly constant since the introduction of the National Health Service. The inference to be drawn from this is that the N.H.S. will never replace entirely, or even to a major extent, self-medication. This is a very important point since it is contrary to a popularly held belief.

The success of marketing a "non-ethical" proprietary is dependent upon three factors: (1) The value of advertising and the form of appeal it is to make to the public; (2) the type of ailment for which the preparation is intended as a remedy, and (3) a matter of great importance, the type and size of packaging. The package must be attractive to win popular appeal, and its size, and therefore its price, must be right. In the advertising of proprietary medicines manufacturers lay great stress upon the therapeutic efficacy of their preparations, but there is no doubt that exaggerated and blatant claims are fast disappearing through the efforts of voluntary control by the Joint Committee responsible for formulating the British Code of Standards in relation to the Advertising of Medicines and Treatments. Membership of this Committee includes newspaper and advertising interests, as well as the Proprietary Association of Great Britain, to which many proprietary medicine manufacturers belong.

Pharmacists have never enjoyed a monopoly in the sale of proprietary medicines, other distributive outlets being found in grocery shops, bazaars and chain stores. The increasing extension of the distribution of proprietary medicines through non-pharmaceutical channels led in 1935 to the formation of the "Chemists' Friends" movement, which was the first serious attempt to stem the tide in this direction.

The Chemists' Federation

The scheme was first suggested by a group of Plymouth pharmacists who recommended that pharmacists collectively should boycott, or refuse to give any sales promotion whatever to the products of manufacturers who marketed new proprietary medicines other than through pharmacies, and they called it an "out of friends" scheme. This scheme envisaged the compila-

tion of a "black list" of manufacturers, but there were important legal difficulties which rendered such a suggestion impracticable. Nevertheless, it was quickly seen that the idea had considerable possibilities, and that a positive approach involving no legal obstacles would achieve a greater measure of success than the suggested negative one. In other words, pharmacists should be encouraged actively to support and promote the sale of proprietary preparations of manufacturers who restricted their sale through pharmacists only. The change was therefore made and the Chemists' Friends' Association was launched. During its formative period it was realised by all three sections of the pharmaceutical industry that control of the retailing of medicines was not only in the interests of pharmacy, but of the community as a whole. Some measure of responsibility had therefore to be accepted for articles which were manufactured and sold by its members.

The second great change came in the organisation in 1941 when the Chemists' Federation, as it then came to be known, formulated standards for the quality of the products and the claims made regarding their use. A Standards Committee was appointed which has worked efficiently and successfully over the past few years, but certain pharmacists feel that even now the standards are not strict enough for the inclusion of a preparation in the C.F. List, and would like to see the controls become even more stringent. An apparent weakness in the movement, too, is that the Standards Committee is appointed from among its own members, and, as late as 1955, it has been recommended that the Federation would secure higher prestige and public support if the committee became entirely independent or if an independent chairman were appointed. It could then pass unbiased judgment upon any preparation without fear of unjust criticism.

The question of applying standards to proprietary medicines in relation to composition and presentation, methods of advertising and claims made for their efficacy, is an important one. It was a great step forward in the C.F. movement when the Code of Standards was inaugurated, and retail pharmacists are reminded that they must observe the same rules in respect of preparations which they formulate and market under their own names as are applicable to the products of C.F. manufacturers. It must be stressed that advertisements for "own name" products expressing exaggerated claims which cannot be substantiated will ultimately react unfavourably upon pharmacy as a whole.

The retail pharmacist, too, has a responsibility in respect of the handling of medicines. He claims to be an authority upon them, and endeavours to restrict their sale through pharmaceutical channels for the protection of the public. It is wise to remember this when certain proprietary preparations are handled in respect of which the standards of advertising and claims made are open to serious question. The Chemists' Federation has a proud record of service to pharmacy, and it merits the fullest support and encouragement. One



Longer Life for all Mankind . . .

Every day, everywhere . . . somebody's health is improved . . .
somebody's life is prolonged.

Throughout the world Monsanto Pharmaceuticals play a vital part
in the betterment of man's health.

Monsanto safeguards both quality and uniformity, from the raw
material right through to the finished product. All products are
carefully checked by highly qualified chemists at every stage of
manufacture—to ensure their strict compliance with pharmacopoeial
and other standards.

MONSANTO CHEMICALS (AUSTRALIA) LIMITED

Head Office: Somerville Road, West Footscray, W.12, Victoria . . .
Servicing Victoria and Tasmania

INTERSTATE SALES OFFICES

New South Wales, Queensland, South Australia

MONSANTO AGENTS

Western Australia: Gollin & Co. Ltd., Perth

New Zealand: Gollin & Co. Ltd., Auckland, Wellington, Christchurch, Dunedin

SERVING INDUSTRY . . . WHICH SERVES MANKIND



IODEX

REGD.

for the relief of pain and swelling



Menley & James (Australia) Limited, (incorporated in England)
Corner Denison and Spring Streets, N. Sydney, N.S.W.

XY124A

hundred and twenty-one manufacturers are now included in its list, and they control between them more than 3,000 C.F. proprietary preparations.

Proprietary Articles Trade Association

Another excellent organisation of inestimable value to the economic stability of retail pharmacy is the Proprietary Articles Trade Association. Older pharmacists will vividly recall the appalling economic conditions prevailing in pharmacy at the end of the nineteenth century. Few of the younger pharmacists have any knowledge of this state of affairs, or of the circumstances which led to the formation of the P.A.T.A. Therefore I propose to devote a little time to an enlargement of the historical aspect of the subject as given by Mr. Chapman.

During the latter part of the nineteenth century the sales of proprietary medicines began markedly to increase. These increased sales were at the expense of chemists' trade in unbranded drugs and in preparations which were sold under an "own name" label. The manufacturers published both in the Press, and on the package, the retail price to the public. Certain retailers, notably the multiple stores, in order to advertise and increase their own business, resorted to the practice of offering for sale proprietary articles at prices below those which were specified by the manufacturers. This cutting of prices inevitably led to unrestricted competition between traders, other retailers being compelled to reduce their prices either to the level of their near neighbours, or even below them. Naturally in a price-cutting war of this type the shops controlled by "big business" were able to sell at prices lower than the independent proprietor could purchase them from his wholesaler. It was not unknown for a private pharmacist to purchase certain proprietary articles by retail from his multiple competitors, since this was a cheaper method of buying them than through normal wholesale distributors. This chaotic state of affairs, had it been left to go unchecked, would undoubtedly have led to pharmaceutical business passing into the hands of a few large multiple concerns, with the gradual wiping out of the small individual proprietor pharmacist. Such were the circumstances that led to the formation of the P.A.T.A. by Sir William Glyn-Jones in 1896.

This short survey would be factually incomplete without some reference to "substitution," which was also widespread, and an accompaniment of price-cutting practice. Because the selling of proprietary medicines at cut prices was completely unremunerative, chemists resorted to persuading customers to purchase a substitute article carrying a higher rate of profit. The manufacturers who had spent large sums of money on advertising were deprived to a large extent of the fruits of these efforts by the keen, persistent action of the distributors in recommending substitute preparations. Manufacturers who were alive to this threat to their interests could see that by the introduction of a collective system of resale price maintenance not only would their own interests be safeguarded by the elimination of substitution, but the free passage of their goods through wholesale and retail distributors would be assured by the stability of fixed profit margins. The plan, in essence, was that, if the price of the goods of only one manufacturer were cut, then all the manufacturers in the scheme would withhold supplies of their goods from the cutter. The success of the P.A.T.A. over the past 60 years is a monument to the work and untiring efforts of its founder, Sir William Glyn-Jones.

What is the relevance of this historical background at the present time? It is my belief and contention that the abolition of the collective system of resale price maintenance of proprietary articles, unless an equally effective alternative were introduced, would again lead to widespread cutting with disastrous results to the retail pharmacists of this country. The economic

stability of retail pharmacy depends upon a system that will ensure fair profits for wholesalers and retailers alike. The wholesaler is an indispensable link in the distributive chain, since it would be quite impossible for the individual proprietor pharmacist to purchase all his requirements direct from each manufacturer. The number of proprietary items that a retailer is expected to stock is fantastic, and many of these lines are carried in single units only. An efficient wholesaler therefore is an absolute necessity, more so than ever since the advent of the National Health Service. The whole wage structure in the distributive trade is dependent upon stable prices, and price-cutting would cause low wages and bad conditions for all concerned. The public, too, would suffer through an inferior service brought about by the elimination of the personal proprietor, as well as from the confusion of varying prices and substitution.

An American Case

In case some pharmacists feel that these views are unreal or far-fetched, I would remind them of what happened in the United States of America following the Supreme Court's decision in the *Schwegman* case in 1951. Here an outbreak of competitive price cutting of proprietary goods exceeded anything known in American trade history, and this at a time of full employment and high wages. So damaging and disastrous were the results that it is interesting to recall that in a country traditionally sensitive to monopolies, price-rings, etc., the McGuire Amendment restored order out of chaos within two years of the price-cutting outbreak. On July 14, 1952, the President of the U.S.A. signed the Bill enabling manufacturers once more to control the minimum resale prices of their branded goods in 45 States.

In January, 1953, the President of the Board of Trade announced that he had, under Section 15 of the Monopolies and Restrictive Practices (Inquiry and Control) Act, 1948, required the Monopolies Commission to submit a report upon the general effect on the public interest of such practices as "exclusive dealing" and "collective boycott." The P.A.T.A. comes into the latter category, and along with the Chemists' Federation, which was the subject for investigation under "exclusive dealing," submitted evidence to the Commission. The Monopolies Commission Report was published in June, 1955, and on July 13, 1955, it was debated in the House of Commons. This matter is of such vital importance to retail pharmacy that pharmacists should make themselves fully conversant with the facts of the situation.

Report on Monopolies

The Report of the Monopolies Commission on Collective Discrimination (Cmd. 9504) was prepared by a committee of 10 members of the Commission specially appointed for this purpose. It is in two parts—a Majority Report, to which seven members have subscribed their signatures (one with a qualifying reservation), and a Minority Report which the other three members have signed. The general conclusions of the Majority Report (Chapter 9) are that the collective enforcement of resale price maintenance is against the public interest, though there may be special circumstances when the use of some of them may be justified. This section of the Report suggests that further legislation would be necessary to implement their findings and recommends (1) that all agreements falling within the scope of the terms of reference of the Commission should be registered, and such of them prohibited as after individual scrutiny were not found to be in the public interest; or (2) that there should be a general prohibition by statute of all such agreements with provision for exemption in particular cases. The signatories of the Minority Report state quite categorically: "We are not prepared to say that the referred practices as they exist over a wide field of trade and industry are, in general, injurious to the public interest and should be prohibited and made

illegal by statute. The evidence and information put before us do not in our view justify so sweeping a condemnation." The qualifying reservation made by the other member of the committee is to the effect that he does not consider that collective arrangements for the enforcement of resale prices prescribed by individual manufacturers in general operate against the public interest.

The Committee made no observation as to whether resale price maintenance itself is, or is not, a bad thing. What it did say by a majority of 6 : 4 was that the collective enforcement of resale price maintenance, a system operated by the P.A.T.A., was against the public interest, and although the majority made no recommendation for any effective alternative method of enforcement, the minority put forward practical proposals for the future control of resale price maintenance by means of a system of registration.

Chapter 3 of the Report deals with "Collective Discrimination by Sellers" and the Chemists' Federation is examined in this section. Only general conclusions again are reported, and these are to the effect that the "general effect of agreements between sellers binding them to sell exclusively or at preferential prices to persons who are listed or defined according to their qualifications or status is that they operate against the public interest." However, a further very important statement is made later: "We recognise that there may be a small number of trades in which this general disadvantage is outweighed by certain positive advantages . . . Normally we would expect to find special legislation as in connection with the sale of poisons to protect the public against risks . . ." Although no specific reference is made to the Chemists' Federation here, it would appear that the very strong case submitted for its continuance has been favourably received by the Commission.

The subsequent debate in the House of Commons was illuminating in many ways. The President of the Board of Trade in his opening remarks said, "The fixing by manufacturers of the retail price of their goods has been examined on three separate occasions over the last 30 years; by the Committee on Fixed Retail Prices in 1920, by the Greene Committee in 1930, and by the Lloyd Jacob Committee in 1948, and individual price maintenance has never been condemned by any of these reports. Manufacturers, distributors, consumers and the trade union movement, all gave evidence that they believed it to be in the public interest. Any Government faced with that evidence would, or should, hesitate before rejecting it, and I certainly do not propose to reject it in the context of this debate" (the italics are mine). This is clear evidence that the Government is in favour of resale price maintenance as such, and that it is only the method of enforcement which is in question. The President in detailing the Government proposals went on to say: "We intend to take power by Act of Parliament to require the registration of those restrictive practices which we shall from time to time specify. We shall include in the ones for early registration the ones referred to in the Report . . . and once the registration authority has called forward for registration any particular class of agreement, if the firms wish to operate or continue to operate an agreement in this class, they must register. Then the tribunal with the information that the register makes available, will call upon them by a given date to come forward and make out their case for employing that particular practice." There are thus two stages. First there will be registration of agreements and, second, an examination and judgment by an appointed tribunal. Further comment cannot be made until the full text of the proposed legislation is known, but in my view, there is still a need for constant vigilance without being unduly pessimistic.

Prescribing and "Ethical" Proprieties

In the early stages of the National Health Service proprietary medicines were freely prescribable. With the introduction of the Cohen Committee Reports doctors were requested not to prescribe items falling into Categories 5 and 6, and they were warned that if they did so they might have to justify their action before their local Medical Committee, or be surcharged. This was bound to have some effect upon the type of preparation prescribed, and it was a false hope by the Ministry, that it might also effect the volume. The classification of proprietary medicines by the Cohen Committee, and the prescribing of ethical has been dealt with by Mr. Treves Brown, and there are one or two general comments that I should like to make upon this section of his paper.

Figures have been given which show that since the commencement of the National Health Service the prescribing of proprietaries has steadily increased. These figures prove that the fears expressed by the "ethical" proprietary manufacturers early in the scheme were groundless, although their worry at the present time is to endeavour to justify their prices to the Ministry's investigators. It must, however, be made perfectly clear that the influence of the economy measures and the publicity given to the Cohen Committee recommendations has seriously affected the sales of proprietaries of certain individual manufacturers. A fact of significance to the retail pharmacist is that the 33 per cent. of all prescriptions covering proprietary products now account for no less than 60 per cent. of the total net ingredients cost in the drug bill. A prescription survey carried out by the "Retail Chemist" in February, 1955, shows that three manufacturers account for 33 per cent., and that some 10 collectively account for 55 per cent. of the total volume of proprietaries prescribed. It is therefore clearly apparent that the largest share of the "ethical" proprietary market is in the hands of comparatively few manufacturers.

Problem of Surplus Stock

The fact that the volume of ethical proprietaries prescribed had risen so enormously over the past few years was bound to have a profound effect upon dispensing practice. The amount of capital a retail pharmacist has now tied up in "ethical" proprietary stock is truly considerable, and the position is worsening rather than improving. It is customary for a manufacturer to launch a new "ethical" product with a direct mailing campaign to doctors and pharmacists, and to follow this through with personal contact. This procedure will inevitably lead to the issue of prescriptions for this preparation, but, in the early stages, most pharmacists will proceed cautiously and order only as and when required. If, however, the demand persists, the pharmacist will be compelled to take the product into stock to provide a satisfactory service for the patients. This situation continues quite satisfactorily until a newer preparation appears, or a representative calls upon the doctor expounding the merits of a rival product, when the first is quickly superseded by the second, and the prescribing of this begins. Every retail pharmacist is abundantly familiar with this iniquitous cycle of events and it does not require enlarging upon. As each successive "ethical" replaces the last, more and more money is tied up by the pharmacist in dead stock. To a more limited extent the wholesaler, too, is affected, although he, in fact, can recoup a good deal of his loss because of his wider distribution.

Pharmacists can, and do, enjoy a measure of helpful co-operation and goodwill from their medical colleagues, but it is too much to expect that this alone will solve

'CETAVLON'

Cetrimide B.P.

A new and improved quality



For over ten years 'Cetavlon' has been widely used in hospitals and in general practice as a valuable cleansing and bactericidal agent.

Recent developments in manufacture have resulted in the production of a new higher grade 'Cetavlon' enhanced in purity and potency. Furthermore, by achieving a correct balance of long chain alcohols used as starting material it has been found possible to increase the solubility in water and hence facilitate the preparation of clear, stable solutions. The new quality 'Cetavlon' shows increased bactericidal potency against a wide range of Gram-positive and Gram-negative organisms including *Ps. pyocyanea*. It is therefore eminently suitable for use in wound and burn therapy, pre-operative preparation of the skin, skin diseases, etc. The new 'Cetavlon' is available as:—

'Cetavlon' Powder

Containers of 50, 500 grammes and 2 kilograms.

'Cetavlon' Concentrate 20%

For the ready preparation of solutions of the required strength.

Bottles of 100 c.c., 500 c.c. and 2 litres.

'Cetavlon' Tincture 0.5%

For preparation of the skin for surgery and for injection.

Bottles of 100 c.c. and 500 c.c.

'Cetavlex' Cream 0.5%

A convenient preparation for use in the treatment of wounds and burns and as a first aid dressing, etc.

Tubes of 50 grammes.

A Product of
IMPERIAL CHEMICAL (PHARMACEUTICALS) LIMITED
(A subsidiary of Imperial Chemical Industries Limited) MANCHESTER, ENGLAND

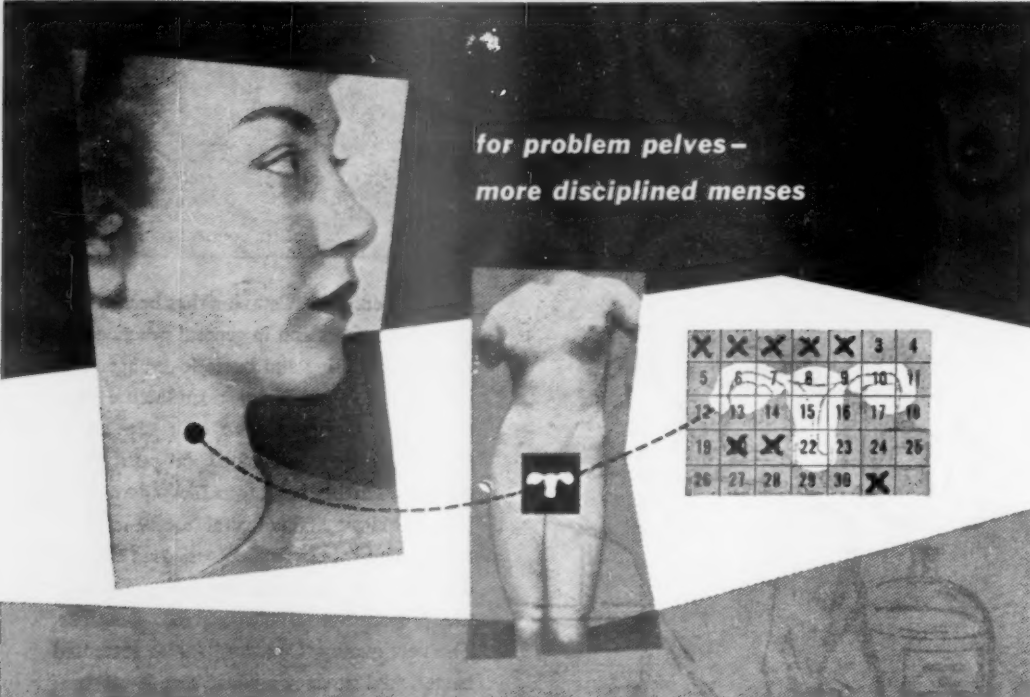
Marketed in Australia by

IMPERIAL CHEMICAL INDUSTRIES OF AUSTRALIA AND NEW ZEALAND LIMITED
ALL CAPITAL CITIES AND WELLINGTON, NEW ZEALAND.



MED. 54X. 4267

AVAILABLE UNDER NATIONAL HEALTH SCHEME



for problem pelves—
more disciplined menses

X	X	X	X	X	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	X	X	22	23	24	25
26	27	28	29	30	X	

Predictable thyroid therapy

A clear correlation between hypothyroidism and gonadal dysfunction shows "... a more than coincidental relationship between thyroid disease and pelvic disorders. . . ." When you employ thyroid therapy as a "fundamental" in the management of menstrual irregularities in hypothyroids,³ use Proloid, for therapy that is more *predictable*.

Virtually pure thyroglobulin, Proloid is assayed both (1) chemically and (2) biologically in test animals to provide constant potency and uniform metabolic effect.

Proloid purity and predictability make it especially valuable for therapeutic tests too. In some puzzling cases, "... even though sharply defined manifestations of

diminished thyroid function are absent,"³ a therapeutic test is justified. But a test with Proloid is more likely to be definitive—free from therapy-induced ups and downs due to potency variations.

Proloid is prescribed in the same dosage as ordinary thyroid and is available in 1/4 and 1 grain tablets.

Proloid

Bibliography:

1. Ferrer, F. P., and McGavack, T. H.: *Am. J. Surg.* 85:67 (Jan.) 1953.
2. Mason, L. W.: *West. J. Surg.* 55:338 (June) 1947.
3. McGavack, T. H.: *The Thyroid*, St. Louis, C. V. Mosby Co., 1951.



WARNER-LAMBERT PTY. LTD.

508-528 RILEY STREET, SYDNEY, N.S.W.

AJP, PRO. 55, AUS.

the problem, so that some collective action on our own part is therefore necessary. In Portsmouth, the local Association inaugurated a scheme for the benefit of its members that has now been working extremely successfully over the past eighteen months. It operates as follows:

Each member of the Association is invited to submit to an organiser a list of "ethical" products, complete or in broken bulk, which are surplus to his requirements. The organiser collates these lists and arranges the items in alphabetical order below the name of the pharmacist who is anxious to dispose of them. The completed list is then duplicated and circulated to all Association members. When the list is received the items are scanned to see if it is possible to relieve one or more fellow members of some of their excess stock. "Ethical" proprietaries that have gone out of fashion in one area are quite often being freely prescribed in another. It is therefore possible as soon as the list is received to arrange for a good deal of exchange. Members usually telephone each other for requirements, but collection and transfer of goods from one pharmacy to another presents something of a problem. In practice, however, it is found that this difficulty is not insurmountable, pharmacists being prepared for some inconvenience since the scheme is one of mutual help and the stock is paid for on the spot to minimise bookkeeping. It may be that upon receipt of the list a pharmacist finds that he is unable to take any excess stock from another, but during the month a prescription calling for a new proprietary preparation not previously dispensed by him may be received. By reference to the list it will often be found possible to obtain this item from a colleague against the alternative of ordering from a wholesaler. The lists are brought up to date and circulated monthly, and preparations that are sold and cleared are deleted from the list and new ones added. It must be stressed that only good, clean stock can be included in such a scheme, and that it would be detrimental to all concerned if very old stock were permitted. It has also been agreed that an item can remain on the list for a twelve-month period only, so that, if it has not been cleared within this time, it must be regarded as having been written off. Of course, if other local Associations were to set up similar organisations it would be a practical proposition to exchange ethical proprietaries over a much wider area with more satisfying results.

Problems of Dispensing Proprietaries

The increase in the prescribing of proprietary medicinal preparations has produced a problem as to the correct method of dispensing them. This problem has not previously been tackled by the profession or industry although it is becoming more and more acute. There is no uniform standard for dispensing proprietaries at the present time, and methods differ according to the ideas of individual pharmacists. This state of affairs cannot fail to cause confusion in the public mind and ought not to be allowed to continue. The problem is one to which there is no easy answer or simple solution, but pharmacists themselves, in co-operation with the industry responsible for manufacture and packaging should set about the task of formulating a satisfactory uniform system at once. The co-operation and goodwill of the pharmaceutical industry is absolutely essential if satisfactory progress is to be made. The following points are offered as a basis for discussion on this important aspect of the subject.

(1) Many proprietary medicinal preparations have become well established with quite considerable over-the-counter sales, although they have never been advertised in the lay press. The sales that these preparations enjoy have been fostered by the repetitive and increasing number of prescriptions issued for them. In spite of this, manufacturers should be willing to vary or change

their packaging arrangements in the interests of proper dispensing practice.

(2) In amplification of (1) above I would point out that most proprietary ointments are now issued in enamelled tin tubes. The trade or brand name of the proprietary is quite boldly exhibited—with the exception of the antibiotic preparations which cannot be purchased over the counter in any case—and it is quite impossible to obliterate this with a label, even if one wished to. To my mind, too, it is an utter waste of time, money and effort to remove the enamel from the tube with a solvent. An admirable method of packaging this type of preparation for dispensing would be for the tube either to be white enamelled, with a tear-off label stating its trade name and composition, which could be removed at the time of dispensing, or for the plain tube to be enclosed in a carton with a removable sleeve, which, too, could be taken off at the time of dispensing, leaving a plain white carton for affixing direction details and the name and address of the pharmacy. These methods are at present used with certain preparations, and a general extension should be made.

(3) It is my view that all technical or medical literature should be removed from packages at the time of dispensing, except where such a pamphlet includes specific directions for the correct use of the preparation, as with certain proprietary ear and nasal drops.

(4) All labels should be removed wherever possible except where the prescriber specifically directs that they be retained, as for example, where there is the instruction to supply an original pack. The difficulties of removing all trade marks are too apparent, since while it may be possible to remove labels, yet the proprietary may be packed in an embossed bottle or jar, or the closure may be clearly stamped with the name. One therefore defeats the whole purpose of the other, and it is not always practicable completely to repack the preparation since time and cost are additional factors that must be taken into account.

(5) Polythene is being used for containers, especially for nasal nebulisers to an increasing extent, and I feel that the remarks made about tubes are applicable here.

(6) Manufacturers should cease to emboss the trade name of a product on tablets used for dispensing. This practice is embarrassing for pharmacists, since in many cases doctors do not wish their patients to know the treatment prescribed for them. It is impossible to prevent this knowledge if the brand name is imprinted on the tablet. Again, the practice is obviously designed to foster over-the-counter sales by indirect advertising.

(7) It would be an advantage to all concerned if the date of manufacture could be incorporated on all packages. Certainly it is essential that an expiry date be given where applicable, but it is not always known especially with new products, that they may deteriorate on storage. Only recently it has been found that vitamin products, etc., vary in potency according to the time and conditions of storage, and one manufacturer is now giving an expiry date. I feel that the date of manufacture would in some measure be a useful guide to the pharmacist in determining the advisability of dispensing ethical preparations. Even in the best organised pharmacies with efficient systems of stock control, stock that has become out of condition or outdated is occasionally found because new stock is placed in front of earlier purchases. No amount of staff training can entirely eliminate this element. Moreover, the retail pharmacist is completely unaware of the length of time the preparation has been held in stock, by either the manufacturer or the wholesaler before it reaches him.

(8) In my opinion manufacturers should voluntarily and collectively stabilise package sizes. At the moment the retail pharmacist is plagued with a varying assortment of package sizes, and is faced with the problem of

determining the most advantageous and suitable ones to meet his own dispensing needs. This matter, of course, is closely bound up with the problem of surplus stock. It is quite fantastic that some manufacturers should pack proprietary tablets in 25's and 500's only, or, more glaringly, 10's and 250's. This criticism does not apply to tablets only, since liquids, too, are packed in ludicrous sizes of 4 fl. oz. and 40 fl. oz. In this connection manufacturers cannot make the plea that it is to save costs, because, if it is, in many cases only an infinitesimal part of the saving is passed on to the retail pharmacist. A more uniform system of package size could be evolved that would benefit manufacturer and retailer alike.

(9) A system should be devised to prohibit different manufacturers from marketing the same standard or official drugs under varying trade names. This practice is the serious cause of much annoyance to the retail pharmacist. It must be conceded that the manufacturer who engages in genuine scientific and medical research should be safeguarded, but it is wrong when a preparation has been made official for other manufacturers to make capital out of the position. The situation is even more alarming when one realises the number of proprietary preparations that are merely combinations of two or more official drugs. The position does not end here since in one particular instance several colours exist for the same proprietary product and doctors can make their choice. One hesitates to mention control, but surely some restraint is needed.

Because of the conditions enumerated above, the question of substitution is often discussed.

Substitution

The points worthy of consideration when deciding whether it would be desirable and/or practicable when an "ethical" proprietary preparation is prescribed to permit the dispensing of an equivalent whether official or alternative proprietary, may be summarised as follows:

(1) A pharmacist substituting an official equivalent or alternative proprietary for a prescribed "ethical" preparation is guilty of an offence in law under the Trade Marks and Merchandise Marks Acts.

(2) It is open to serious doubt whether the same legal objection applies to the same procedure in hospital pharmaceutical practice. It is not fully understood whether the dispensing of a substitute preparation in a hospital constitutes a "sale" in the same manner as a sale is considered to take place when a patient is supplied with medicaments ordered on an E.C.10.

(3) In hospital practice rarely does the patient see his own bed ticket on which prescriptions are recorded, and therefore he is not readily aware of the specific treatment for his condition. Also substitution may not be apparent to him.

(4) Patients treated under the general medical service have become proficient in the art of prescription reading, particularly where items are written in English instead of the traditional Latin, this being predominately the case with "ethical" proprietaries. They are therefore clearly aware of substitution, should it occur.

(5) In many cases the patient requests, and in certain instances insists, that the doctor prescribes proprietary preparations for the treatment of his condition. This dictatorial attitude, falsely bound up with a presumptuous right because a weekly stamp contribution is made, is, of course, wrong, but the Ministry shows a singular lack of understanding of present-day medical practice when it issues the injunction to doctors to refuse to prescribe where it is thought no prescription is needed, and to cultivate sales resistance to manufacturers' representatives!

(6) It is my view that pharmacists should not be expected to usurp the professional responsibility of the prescriber merely for the sake of economic expediency.

Purchase Tax

All drugs and medicines manufactured or prepared fall under Group 33 of the Eighth Schedule to the Finance Act, 1948, and are subject to 25 per cent. Purchase Tax. There are notable exceptions, chiefly those preparations that are supplied in a special dispensing pack. The relevant section states that the goods may be put up under a brand name or trade mark without invalidating the title to exemption from tax, and the goods themselves may be trade marked. Exemption from tax is conditional on the Commissioners being satisfied either that the substance itself is of a kind supplied to the public only on the prescription of a doctor or other authorised person, or that the substance will not be sold across the counter to the public in the original get-up, or from the dispensing pack in which it was supplied to the pharmacists.

Containers or labels which bear brand names or trade marks must be conspicuously and indelibly marked with the words "For Dispensing Only" in distinctive colouring. In addition the following legend must appear conspicuously on the container: "Contents to be supplied to the public on prescription only. Supplied free of Purchase Tax solely on this understanding." The legend, but not the words "For Dispensing Only" may be omitted from very small containers on which it is impracticable to show it, provided such containers are supplied to the pharmacist in outer containers on which both the words and legend are properly shown. Dispensing packs are only available to the following classes of persons:

(a) An authorised seller of poisons within the meaning of either the Pharmacy and Poisons Act 1933 or the Medicines, Pharmacy and Poisons Act (Northern Ireland) 1945,

(b) A hospital, infirmary, health centre, dispensary, clinic, nursing home, or other institution at which human ailments are treated and

(c) A duly qualified medical practitioner, a registered dental practitioner and a registered veterinary surgeon or practitioner.

Group 33(c) sets out another very important list of drugs and medicines that are specifically exempted from tax. The list includes such substances as insulin, stilboestrol, hormones, cocaine, homatropine, hyoscine, liver extracts and active principles, vaccines, sera and vitamins, etc. It is because of the exemption granted to substances in Group 33(c) that certain popular proprietary counter specialties are sold free of Purchase Tax.

Payment for Proprietaries under N.H.S.

In July, 1953, the Ministry issued a directive that for certain proprietary preparations they would only pay on the basis of a supply having been made from a "specified basic pack"—the size being listed—unless the prescription was endorsed by a chemist contractor to the contrary to show that a smaller size had been used. The right of endorsement, however, is not an absolute right since it has to be accepted by the Executive Council. The list contains some 30 items and was designed to effect a measure of economy in payment. The Ministry have been anxious to extend the list but, fortunately, so far their efforts have been resisted.

The Ministry, too, have continued to exert pressure upon manufacturers to reduce the prices of proprietary preparations with consequent financial loss to the chemist contractor. In April, 1955, the Central N.H.S. (Chemist Contractors) Committee successfully concluded negotiations with the Ministry and secured an alteration in the



Greetings for the festive season...

And Best Wishes for a successful New Year

from **JAMES HARE & CO. PTY. LTD.**

DISTRIBUTORS OF

Goya
PERFUMERY

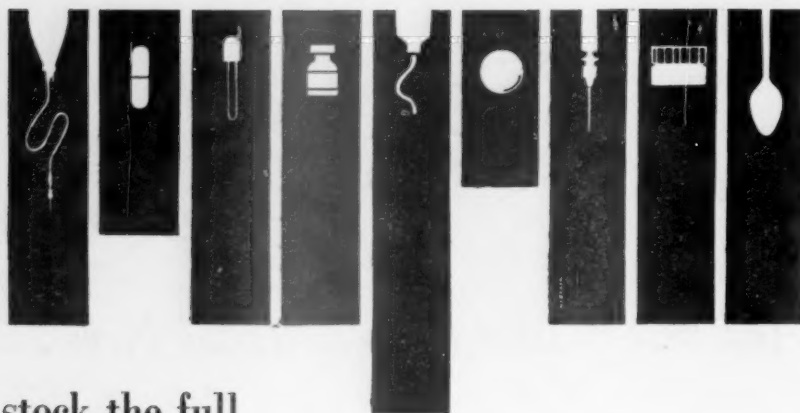
Steadiflow
BABY'S FEEDING
BOTTLES

Gordon's
BABY'S SOAP

bandbox
SHAMPOO

Headspin
HOME PERMANENT

AMPLEX
DEODORANT TABLETS



stock the full

Terramycin

Pfizer line!

More and more physicians are prescribing Terramycin as the broad-spectrum antibiotic of *first choice* in the treatment of a wide range of infectious diseases.

Only Terramycin offers the physician prompt, well-tolerated action combined with utmost convenience of administration.

Terramycin is available in a variety of convenient dosage forms for flexible, individualized therapy.

And . . . like all Pfizer products, Terramycin is a drug of highest quality, purity and potency.

Remember, it pays to stock the full Terramycin line!



WORLD'S LARGEST
PRODUCER OF
ANTIBIOTICS

TERRAMYCIN
TETRACYN
COMBIOIC
PENICILLIN
STREPTOMYCIN
DIHYDROSTREPTOMYCIN
POLYMYXIN
BACITRACIN
COTINAZIN
PRONAPEN

Sole Distributors

F. H. FAULDING & CO. LTD.

MANUFACTURING CHEMISTS, AUSTRALIA . Est. 1845

pricing arrangements for proprietaries which now afford some measure of protection against loss resulting from these enforced reductions. The scheme which will be reviewed in early 1956 is as follows:

(1) Where the price of a proprietary is altered between the first and eighth of the month (the new price would normally have been used for pricing this month's prescriptions) it is not used for pricing purposes until the following month.

(2) Where a price is changed after the eighth of the month (and would normally have been taken into account when pricing the following month's prescriptions) the new price is not used in the Bureaux until the second month following.

This arrangement permits the chemist contractor a longer time to help clear stock, but does not apply in the following instances:

(1) **Manufacturers' Rebates.**—Where a price is reduced and rebate is given by the manufacturer for stocks on hand at the time of the change, the reduced price will be put into operation under the normal rule.

(2) **New Products, or New Packs of Established Products.**—Where a new product is introduced or an addition is made to the range of forms of an available product, the price will take effect immediately.

(3) Price increases are covered by this arrangement as well as price decreases.

Information Service and Nomenclature

There are several ways in which a pharmacist receives information about new proprietary products and these can be summarised as follows:

(1) **From Personal Interview with a Manufacturer's Representative.**—Most manufacturers of ethical proprietaries employ medical representatives whose duty it is to detail their products to the medical and pharmaceutical professions.

(2) **From Literature Mailed Direct to Him by the Manufacturer.**—Every post brings to both doctor and pharmacist alike a vast amount of literature about all kinds and types of proprietary preparations. This literature arrives in every conceivable shape and size, and consists of leaflets, booklets, index cards, blotters, etc. Unless the important details are abstracted from this material, or the literature itself filed in some systematic way, the information is quickly lost. The details of a very useful system for filing technical literature have been published by John B. Lloyd, Chief Pharmacist at Manchester Royal Infirmary. The system involves the use of two files; an alphabetical file of index cards, and a pamphlet file consisting of numbered folders, the literature being stored in the latter and filed according to the pharmacological action of the product. The article is worthy of attention.

(3) **From Reading Technical, Trade and Professional Journals.**—A good deal of useful detailed information is often to be gained from medical and pharmaceutical periodicals, and in some cases this is set out in convenient form for the pharmacist to paste on to index cards for easy filing and reference.

(4) **By Subscribing to a Service such as the "Index of New Products."**—This service was inaugurated and provided by "The Pharmaceutical Journal." The system, or one of similar type, is an absolute necessity in the dispensary today, and consists of an alphabetically arranged series of cards, each card setting out in detail the composition, indications, contra-indications, dosage, packing and prices, suppliers and references. The idea and method of recording is admirable, and every six months a cumulative therapeutic index is despatched to

all subscribers together with a list of analogous preparations. However, it is essential that the information is received by subscribers as quickly as possible, since a speedy service is vital to be of real practical value.

Closely allied to an information service is the important subject of pharmaceutical nomenclature. This has been expertly tackled by A. T. Elder, M.D., Ph.D., and because of the importance of his conclusions and recommendations they are detailed here. His conclusions are:

(1) Information regarding new proprietary remedies reaches doctors (pharmacists) in a haphazard fashion.

(2) The value of properly indexed and annotated information is apparent.

(3) The danger of confusion of names, dosages and toxicities cannot be disregarded.

(4) Economy in prescribing will be assisted if choice of name, adequate clinical trials and authentication of remedies are properly organised.

The recommendations that Dr. Elder makes are as follows:

(1) That a system of card-indexing of remedies be developed for the medical profession as a whole, so that current knowledge may supplement periodic text book publications.

(2) That the safeguarding of the public be organised through a system of certification or authentication of specially valuable remedies.

(3) That the pharmaceutical industry establish a committee to regulate selection of names before registration in consultation with the British Pharmacopoeia Commission, so as to avoid confusion.

(4) That application for registration be considered by a board or committee acting under the auspices of a suitable central body.

Summary

(1) The National Health Service will never entirely replace self-medication.

(2) The Chemists' Federation and Proprietary Articles Trade Association are essential organisations for the stability of retail pharmacy.

(3) The increasing volume of ethicals being prescribed has had a profound effect upon dispensing practice, causing the serious problem of surplus stock.

(4) There is an urgent need for a uniform standard for dispensing proprietary preparations.

(5) "Substitution" of proprietaries with alternative equivalents is legally and morally wrong.

(6) Purchase Tax in relation to proprietary medicine is anomalous—certain preparations are specifically exempted, and there is no tax on "dispensing packs."

(7) An efficient information service is essential.

(8) Control over nomenclature is a matter for attention by the pharmaceutical industry.

REFERENCES

1. "The National Health Service, Second Year," Neilson, P. 26.
2. The C.F. Code of Standards, p. 1.
3. C.F. Tripartite Meeting, January 27, 1955, Resolution 17.
4. Monopolies and Restrictive Practices Commission. Report on Collective Discrimination (Cmd. 9504), June, 1955.
5. Parliamentary Debate (Hansard), Vol. 543, No. 27, 1944/5/6.
6. "Retail Chemist," July, 1955, p. 52.
7. Commissioners of Customs and Excise, Notice No. 78 B.
8. "Alchemist," May, 1955, p. 280.
9. "Pharm. J.," 1954, 100, 161.

Every Pharmacist Can Be His Own Press Agent

By Frank A. King

It has been admitted for many years that advertising pays, and that it is up to every person selling goods to obtain as much benefit as possible from advertising.

There are two forms of advertising—direct and indirect publicity. The first type is often considered very expensive by the majority of pharmacists, because they do not appreciate that such efforts can be made far more impressive and effective by means of indirect publicity—by those short paragraphs about the chemist and his business which appear in the Personal or Gossip columns of the local or country newspapers in which his advertisements appear.

Every trader has noticed the articles about well-known national firms or organisations which appear not only in local and national newspapers but also in trade papers. This material is sent out by press agents, usually called Public Relations Officers, on behalf of their employers or clients, and there is no reason why every pharmacist should not be his own press agent for his own neighbourhood on much the same lines.

During the past twenty years or so the work of Public Relations Officers has developed more and more as advertisers have appreciated that advertising is not enough. At the same time, the services of such specialists have been utilised not only by Government departments and political parties but by all types of commercial organisations, whether by means of specially created departments or by publicity agents.

Long ago the film industry appreciated that filmgoers were keenly interested in the private lives of the artists, but long before any film company issued the first press statement the theatre and music-halls had provided "copy" for all sorts of periodicals. The popular weeklies gave stories of successful men and women, especially self-made businessmen, and continue to do so. The Government departments developed press relationship work during the Great War years, and found it of greater importance during the Hitler War.

Briefly, the duties of a Press Relations Officer are to explain the purpose and policy of his organisation, not only to those closely connected with the particular trade or section of the community, but also, from time to time, to members of the general public.

The long-established manufacturer may create topicality for such material by linking up with the birth of the founder, as has been the case for several firms producing medicinal preparations, or the commencement of a business long ago, as in the case of one London firm for which I have recently prepared the history to celebrate its bicentenary.

The Press Relations Officer has to keep his client's name or product constantly before the folk concerned, not only by means of advertisements, but also by news items in national or local periodicals—and it must not be forgotten that a small paragraph is read by most readers, whereas the displayed advertisement is often overlooked or ignored, although it may be noticed subconsciously.

Trade organisations often maintain their own press relationship campaigns, furnishing periodicals with information concerning trade difficulties, price increases or reductions, and, more especially, any progress in research concerning the trade, and generally making sure that sales are maintained—but not advocating the virtues of any manufacturer or producer in particular.

The manufacturer's press agent ensures that the trade press is informed on new lines, new packs and improved products, and the activities of those connected with the establishment. Some organisations employ several persons to deal with such matters; other concerns put the work into the hands of an agent who may have several clients.

Any pharmacist can become his own press relations officer if he is prepared to study the basic principles of such publicity campaigns—and is prepared to limit his activities and not to overdo such efforts.

Editors who receive too much publicity concerning a particular firm or person tend to drop such material into the waste-paper basket, unless it has a new angle or has some immediate news value. On the other hand, some local newspaper editors are very diffident about scrapping such material in case an advertiser should be offended, consequently they publish trivialities which irritate some readers, and thereby they "cheapen" the value of the paragraphs they use about other persons and the over-publicised person or firm.

There are times when every newspaper editor or columnist is needing material to fill the news columns, and such persons are always glad to receive a few paragraphs about local personalities or businesses. In some cases the editor may send out a reporter to collect such "fillers." Sometimes the editor happens to have material left over from a previous issue through unexpected news developing just before the paper goes to press. Naturally the editor prefers to have something of a topical or "hot news" nature concerning a local resident or firm than something which could be used at any time.

In many cases local newspapers run a feature covering six to a dozen personalities or firms each week—usually most of this material is sent in by the persons or businesses concerned, and is redrafted by the editor or sub-edited by a reporter. In other instances, the material is collected by reporters or correspondents, who are paid a small sum, either based on the number of lines printed, or so-much per paragraph for each item used.

If you can contact a reporter or correspondent who is paid by such bonuses, it is obvious that he or she will look after the folk who pass paragraphs to him instead of sending the material direct to the newspaper. Often the correspondent will write-up the material in a way which proves more interesting to the readers and more beneficial to the person supplying the information.

How can you obtain such publicity for yourself in the district newspaper?

First, is there some factor which makes your premises unusual? For example, what was on the original site? My office stands on ground on which once stood an old mill, and this point has been mentioned several times by fellows who have written up a few paragraphs about my work as a writer. My flat overlooks the Thames Estuary, and this scene has also provided a link-up for other paragraphs.

Old leaflets or price-lists are always intriguing, so if you find such references in newspapers or amongst papers stored away in the junk-room, this information can be linked with a commentary on current prices—**by yourself!** These prices need not have been connected with your own establishment, provided, of course, the details do not refer to the premises of one of your competitors or his predecessors.

But hobbies, especially unusual pastimes, are always "good copy" for any reporter or editor. If you excel in painting or photography, this can provide the necessary angle, but if you go in for something off the beaten track this is far more interesting.

Scores of readers would be interested in any famous stamp in a collection—and, of course, this need not be an expensive item—but most of them would be far more intrigued with the story of how the local pharmacist obtained such an unusual specimen. Unexpected collections always provide news—collections of Victorian novels, autographs, or bottle-labels pro-

vide more paragraphs than stamp collections. Results cannot be judged by immediate interest created; two years after publication of an item concerning my humble collection of "Penny Dreadfuls" (or Victorian boys' books), resulted in a letter concerning this pastime, and I do not advertise in the paper concerned!

Very often the "Letters to the Editor" section provides a trader with the opportunity to give his opinion concerning local matters, or even national affairs, even though, from the business viewpoint, the only reference may be the address of his business at the end of the letter. Of course, avoid local politics and personalities in such communications. Even if some competitor has made some claim which you know to be inaccurate, do not rush along a letter of correction or protest—this looks too much like professional jealousy or "sour grapes." Have a word with the editor or a reporter, and leave them to make the correction in their own way.

Often the trader's wife can be the basis around which a publicity paragraph can be framed. For instance, "Although Mrs. Senna helps her husband in his pharmacy in Drug street, as well as runs the home without assistance, she still has time to act as secretary for the local branch of the Women's Guild. Often she types the letters to her committee members in between serving customers with their requirements . . ."

In the above example the Committee has obtained publicity and so did the pharmacist!

If you wonder how the local newspaper learned that your nearest competitor was planning to extend his business or that he plans to show his collection of ships-in-bottles in his windows next month, as an unusual attraction, then you can be certain he supplied the information himself either to a reporter or by sending in a short note to the editor.

Agents for political parties or candidates long ago appreciated that it was not enough to send out information just before an election; the policy had to be explained well ahead, and the activities of the candidates presented as soon as they were adopted.

This factor should be remembered by the pharmacist who wishes to become his own publicity agent—he must peg away all the time, and not just send along material when he is making a special effort.

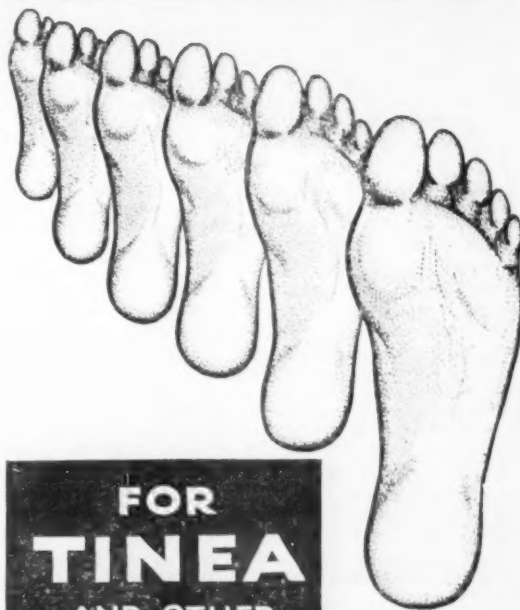
He must also be prepared to co-operate with the editor or reporter—by commenting upon trading matters should the editor require opinions at some time. One good turn deserves some form of reward!

SIDE-EFFECTS OF CHLORPROMAZINE

Necessity For Supervision

Many toxic reactions to chlorpromazine were noted by G. F. Vaughan and his colleagues during their study of its effects on 224 neurotic and psychiatric patients ("Lancet," 1955, 1, 1083). Minor fainting attacks, headaches, vague cramps, dryness of the mouth and transient pyrexia were so common that they were not recorded. In 22 per cent. of the patients complications were sufficiently severe to stop treatment. Symptoms noted were: severe collapse, pyrexia, pains in the legs and abdomen, rashes, gross confusion, severe headache, jaundice, vomiting, severe nausea, tachycardia, constipation, convulsions, facial oedema, parotitis, severe cyanosis of the legs and trophic ulcers, marked depression, cardiac failure and oedema of the ankles, auricular fibrillation, diarrhoea, and haematemesis. The authors conclude that chlorpromazine requires careful supervision, particularly when given to outpatients.—"The Pharmaceutical Journal," June 4, 1955.

UNDEX



**FOR
TINEA
AND OTHER
FUNGUS INFECTIONS
OF THE SKIN**

In the summer months when tinea and other fungous infections become most active the demand for a dependable preparation for their treatment increases in proportion.

Undex, which has proven its effectiveness in the prophylactic and therapeutic treatment of these infections, becomes more than ever a necessity to every pharmacist's stock.

The Cream — in 20-gram tubes

The Ointment — in 2oz. tubes

The Powder — in 3oz. sprinkler drums

**ALFRED LAWRENCE & CO. LTD.
MELBOURNE**

The Women's Section

Correspondent: Miss A. K. Anderson.

New Year Greetings to all Women Pharmaceutical Chemists. May 1956 be a happy and prosperous year for all.

THE ASSOCIATION OF WOMEN PHARMACEUTICAL CHEMISTS OF VICTORIA

Our Xmas Party was held on December 7, at the College of Pharmacy, when the Museum was transformed with large bowls of hydrangea, Xmas lillies and holly, with a decorated Xmas tree giving a festive note. About 100 members were welcomed by the President, Miss Freda Smalley, who also welcomed official guests, Mrs. Sissons, Mrs. Stanton, Mrs. Callister, Mrs. Baird, Mrs. Kent, Miss M. Braithwaite, Mrs. Eric Scott and Mrs. Attiwill.

Each member brought a Xmas gift, wrapped in gay Xmas paper, for the old people at the Community Centre at South Melbourne, and these were placed at the foot of the Xmas tree.

As the evening was very warm, everyone enjoyed the drinks, served in our traditional manner, in medicine glasses, and there was much chatter and laughter as members renewed old friendships and made new ones.

We were all very proud of our younger set, who produced a play for our entertainment. Intended as a play reading, the girls got so enthusiastic that they memorised their parts, in a very short time, and ended up by putting on a splendid performance—in costume—that would have done credit to any theatrical group.

"Family Pride" was a most amusing sketch, and all the girls—Margaret Murrell, Judith Mund, Kathleen Jones, Marion Smith, Norma Pedrazzi and Nancy Ganderton, well deserved the applause they received.

After a delightful supper, served by the Committee, the party concluded with the singing of "Auld Lang Syne."

Victoria wishes all States a very Happy New Year.

THE ASSOCIATION OF WOMEN PHARMACEUTICAL CHEMISTS OF NEW SOUTH WALES

The Christmas season is here again, and once more we turn our thoughts to wishing all our Interstate fellow chemists a happy and joyful Christmas and a very prosperous New Year. We shall be looking forward to seeing all our friends at the forthcoming Pharmaceutical Conference.

We wish to send a special "thank you" to Miss A. Anderson for so ably compiling these pages. It is always interesting to read through notes from other States, and to keep track of events—these pages provide such a means of communication.

Our Christmas party is to be held in the Starlight Room, Australia Hotel, and we hope to provide some interesting entertainment for our guests. We are confident that this party will be hailed a success, and we wish to thank those firms concerned for their unflinching support.

After the Christmas party we shall be adjourning our activities until our usual meeting in February, and we hope also to hold a yacht picnic on a Sunday in February. This date has yet to be fixed, and we ask as many as possible to keep this outing in mind.

Merry Christmas and a Happy New Year from New South Wales.

WEST AUSTRALIAN WOMEN PHARMACISTS' ASSOCIATION

At the time these notes are being written members are looking forward to the Xmas party to be held at Laura Elnitrovici's home, in Wembley, on December 8.

For the past few months members have been active raising funds for the "Slow Learning Children's Group." Over £80 was raised at a morning coffee party at Mrs. Adlard's home in October. Misses Gray and Millar conducted a raffle, as did Mrs. Hunter and Miss Garcia. The fund closed at £112, and members wish to thank all those who contributed so generously.

We are glad to welcome Miss Garcia home after her trip to the Eastern States, and to take the opportunity of wishing all women pharmacists and associates a very Happy Xmas.

THE ASSOCIATION OF WOMEN PHARMACISTS OF TASMANIA

The November meeting was held on November 29, at the home of the Secretary, and it was very pleasing to see so many members—it was one of the best attended meetings of the year.

The President (Mrs. Heath) welcomed several new members and also expressed our congratulations to Miss Margaret Purdon on her success in the Final Examinations.

After a discussion it was decided to hold our annual dinner at The Dutch Inn on December 15, if possible, and the matter was left in the hands of the Secretary to make suitable arrangements.

Miss Janet Anderson was given a warm welcome home after some years in England and the Continent, and she entertained us with coloured slides of England and her trip back via the Panama Canal and U.S.A.

The President thanked Miss Anderson for showing us her films, and the meeting closed with the serving of supper.

THE ASSOCIATION OF WOMEN PHARMACEUTICAL CHEMISTS OF QUEENSLAND

Our final meeting for the year was held in the Lyceum Club Rooms on November 17.

The subject of new meeting rooms was discussed for the purpose of holding our meetings during the coming year. It was proposed that we give notice of our intention to quit the Lyceum Club Rooms, and should no other suitable accommodation be found, the Committee is to meet to make other arrangements for our future meetings.

Our Christmas party held in the Compass Room of Manhattan Gardens on the evening of December 1, proved to be both a social and a financial success. Miss Everett expressed her gratitude to all those who had contributed so generously toward the Enid Underwood Memorial.

May we take this opportunity of expressing our thanks to members of Associations in other States who have contributed toward this fund, and may we wish you all every happiness at Christmas and in the New Year.



Prepared for
that urgent call?
Check your stocks of...

Cilicaine Suspension . .

Cilicaine Suspension, the original Australian Aqueous Procaine Penicillin Suspension, is established as first favourite with doctors throughout Australia. All formulations of Cilicaine are kept before the medical profession by constant detailing, direct mail and journal ads. Remember . . . the Cilicaines are important to you as a Pharmacist because—they are packaged and marketed by Sigma, a chemist owned company. To reach the patient, Cilicaine must pass through your hands. Cilicaines are often needed for urgent administration . . . so be prepared, check your stocks now!

Cilicaine Suspension. Ready for immediate use.
900,000 and 1,500,000 unit vials.

Cilicaine Fortified. Procaine Penicillin plus Soluble Penicillin.
Dry Powder. 400,000 and 1,200,000 unit vials.

Cilicaine Simplex. Dry Powder.
300,000, 900,000 and 1,500,000 unit vials.

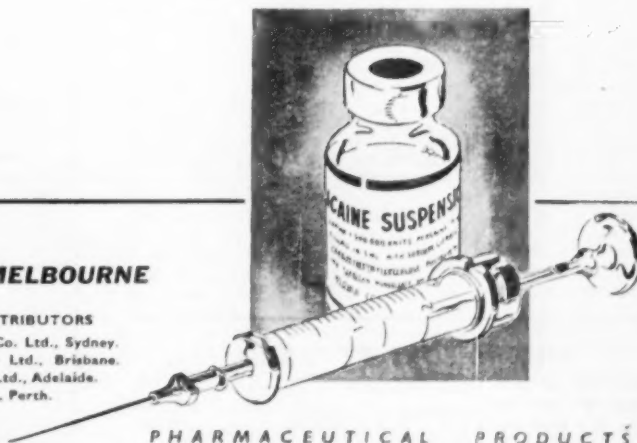
MANUFACTURED BY
SIGMA COMPANY LIMITED, MELBOURNE



INTERSTATE DISTRIBUTORS
The Wholesale Drug Co. Ltd., Sydney.
Queensland Druggists Ltd., Brisbane.
Southern Drug Co. Ltd., Adelaide.
Rumbles Ltd., Perth.

MAKERS OF FINE

PHARMACEUTICAL PRODUCTS



OUR ARTICLE SERIES

WILL BE TAKEN UP AGAIN IN THE
FEBRUARY ISSUE.

TILL THEN WE WISH YOU

*Merry Christmas
and continuation
of
Prosperous Years
To Come*

We Assure You
of the continuation of
our proven policy and
unparalleled repair service
on all products of
CARL BRAUN
of NURNBERG



PHOTIMPORT PTY. LTD.

MELBOURNE: 58 Smith Street, Collingwood — — — — — JA 3571
SYDNEY: 59 York Street — — — — — BX 3216
PERTH: C/o Geoff Martin & Son, 83 Brisbane Street — — — — — BF 1791
Queensland Distributor: Gradwell Bros., 99 Edward Street, Brisbane B 3695
S.A. Distributor: Arthur Searcy & Son Ltd., 138 Grote St., Adelaide LA2891

REDESIGNED MECHANICALLY GLORiette

35 mm.

by Carl Braun



- Amazingly priced from £13/3/-.
- With built-in photo-cell exposure meter—£31/5/-.
- Precision made and redesigned to withstand hard wear.
- Ease of operation.
- All models fitted with Steinheil Cesser f2.8/45 mm. lenses.
- Rigid diecast non-collapsible construction, leather covered, satin chrome finish.
- Double exposure eliminated by Automatic Shutter Cocking with rapid lever wind film transport.

**1 YEAR WRITTEN GUARANTEE
WORLD-WIDE REPAIR SERVICE**

*"Buy Best—
Buy Braun"*

Overseas News

GREAT BRITAIN

London, November 26, 1955.

Branch Representatives' Meetings

On numerous occasions visitors from Australia and other parts of the Commonwealth have been present at the Branch Representatives' meeting which is held during the Conference week. Like the majority of other Conference visitors, they have been there as observers only, as only Branch representatives have been able to take part in the discussions. Now the Council of the Society has decided that the Branch Representatives' meeting will be more closely integrated with the Conference and Branch representatives encouraged to become full members of the Conference. To effect this purpose Branch representatives will be given a book of Conference tickets in addition to their rail expenses, and a grant of £5 towards general expenses. This decision has been reached, as the meeting has not been identified with the Conference as a whole and the Conference proper has not included the professional aspects of pharmacy, as distinct from the technical and research angles. Until a few years ago the representatives discussed motions put forward by the Branches, but for about six years the subjects have been chosen by the Council, and the May meeting of Branch representatives has taken over Branch resolutions.

Cortisone on N.H.S.

The Ministry of Health has made arrangements with United Kingdom manufacturers of cortisone and hydrocortisone which will enable preparations of these substances for oral, parenteral and topical use to be freely prescribable by the medical profession in this country from December 5 next.

These arrangements do not apply to corticotrophin (A.C.T.H.) and certain steroid substances, such as prednisone and prednisolone which, for the time being, will continue to be supplied only through hospitals.

It is expected this alteration will bring an appreciable rise in Health Service prescribing costs.

An Unusual Action

The Rexall Drug Company Ltd. has taken the unusual action of discouraging the unrestricted sale to the public of one of its products known under the trade name of "Tranquilex." This preparation has been advertised to the public for over six months and has been used as a sedative. Tranquilex is a Rauwolfia preparation and the present action has been taken on account of a report in the "Journal of the American Medical Association" which states that a significant number of patients taking 400 mgm. of the ground root of "Rauwolfia serpentina" per day, developed signs of mental depression during two months' administration. This dose is four times that recommended for Tranquilex, but the company is not satisfied that this factor of safety is large enough to justify the unrestricted use of the preparation. Future advertising will be confined to medical channels and chemists have been asked to ensure that it is made available only under medical surveillance. Warning labels, urging avoidance by persons who are depressed, are being sent to pharmacists for affixing to existing stocks.

London Medical Exhibition

At the opening of the London Medical Exhibition, organised by the "British and Overseas Pharmacist," Sir Charles Dodds, Courtauld Professor of Biochemistry, referred to the great changes in therapeutics which followed the introduction of antibiotics fifteen years ago. He thought it was time to take stock of the changing face of medicine and to give some attention to the future structure of the community. The proportion of elderly people was increasing and doctors would be called upon more and more to deal with those minor irritations which accompanied old age. The fact that the great killing diseases were being eliminated would, he thought, make it possible to concentrate pharmaceutical research on those conditions which, while not lethal, were a source of discomfort to elderly patients.

Loss of Cortisone

On November 23, one of the largest stocks of cortisone held in Britain was destroyed in a fire at the Roussel Laboratories Ltd. The damage is estimated at many thousands of pounds, but should not lead to any national shortage, even after the drug becomes freely prescribable, as reported above.

National Health Service Affairs

The National Pharmaceutical Union have recently revealed that a claim for an increased container allowance has been submitted to the Ministry of Health. This claim is for "more than 1½d. and less than 2d." The stated figure has been found from the reviews taken last year in about 2000 pharmacies of the number and type of containers actually used in two separate weeks. The present allowance is a flat rate of 1½d. per prescription and is only half of the amount allowed when the Service began in 1948.

On the pricing side, the Ministry has issued a list of some 76 proprietaries which in future will be priced on the assumption that the contractor has bought relatively large quantities. Those contractors who are seldom called upon for these preparations can endorse their prescriptions to the effect that a smaller size was used and payment will be made at the appropriate rate. The Central Contractors' Committee is undertaking an investigation of prescriptions from representative chemists to determine if the sizes laid down by the Ministry are equitable to the majority of contractors.

Pharmacy Bill in Northern Ireland

A Pharmacy and Poisons Bill is before Parliament in Northern Ireland. Amongst its provisions the Bill sets out the constitution of a Poisons Board which would advise the Minister of Home Affairs on the substances which should be treated as poisons. The Board would include among its members the pharmaceutical inspector of the Ministry of Home Affairs, persons appointed by the Pharmaceutical Society of Northern Ireland, persons appointed by the Faculty of Medicine of Queen's University, Belfast, one person appointed by the Royal Institute of Chemistry, one by the Ministry of Agriculture and one by the Northern Ireland Hospitals Authority. The Bill also permits the increase of the statutory limit for membership fee to £4. The period of apprenticeship is to be reduced from four years to two years, and three years are to be spent in full-time approved courses of study. After the commencement of the Act a person should not hold the office of chemist compounder or dispenser in a public institution unless he is and continues during the period of his appointment to be a member of the Society.

Market Conditions

There has been comparatively little activity on the drug market during the autumn, although a number of

drugs have been in short supply. Spices have been particularly hit by the hurricane in the West Indies which destroyed crops and has forced up the prices of mace, nutmegs and distilled nutmeg oils. The latter is now worth fully 50/- per lb., an increase of 15/-. The ipecacuanha position has improved, and Matto Grosso and Colombian are in fair supply on the spot. Gentian has been scarce and the price is around 130/- per cwt. In the pharmaceutical gums, tragacanth is very firm, but acacia has fallen back to about 140/- per cwt. Very little buchu reached Britain this year and only a few bales are now available. Menthol has been falling and shippers quote from 45/- per lb. upwards.

Like menthol, Chinese peppermint oil and aniseed have declined in value. Lemongrass has been very scarce. On the chemical side, rising costs for transport, fuel and labour have made the general tendency upwards. Recent reductions have been in barbitone, phenobarbitone, nicotinic acid and nicotinamide. Mercurials also are lower following the stabilisation of prices for the metal around £90 per flask.

SOUTH AFRICA

Examination Slaughter

The current report issued by the South African Pharmacy Board reveals that of those candidates who presented themselves for the Intermediate Examination in Chemistry, Physics, Botany and Zoology only 10 per cent. were successful.

There are, of course, "lies, damned lies and statistics" and a careful dissection of the results makes the picture a little better. But only a little. The high mortality rate of those who write first-year examinations is neither confined to pharmacy, nor to South Africa. Those who should know the reason, that is the lecturers and tutors who teach them in the first year, make it plain that they are attempting a superhuman task. The reason, they say, is that the student comes to the College, be it a Technical College or a University, with not only an inadequate basic training in those subjects he is studying, but without the ability to study and without the necessary intellectual ability to appreciate lectures.

Where then lies the fault? With the student? With their teachers? or with the system?

There can be no doubt that in some measure the fault lies with the student. This has become an age when sport and recreation take first place. No one can deny the dictum "*Mens sana in corpore sanum*," and casting my mind back to the "good old days," I would not wish to condemn any youth to the long hours and lack of sport and amusement which fell to my lot.

Certainly in a land like South Africa no blame can be attached to the youth who spends outdoors the fleeting hours of daylight in pursuit of physical fitness, especially when there is so little provision for indoor or floodlight sport.

In order to give youth every possible chance in this direction surely it is possible to rearrange the day so that the maximum work and maximum play is possible? I visualise the rising choler of teachers on being asked to begin their day's work at 6 a.m., but if the bitter pill were sugar coated by making the 6 a.m. appear to be 8 a.m.? I refer, of course, to the introduction of summer time and double summer time.

Here in Southern Africa the idea has been mooted and not pursued since there have been many objections.

This alone is not the remedy to the low scholastic level of matriculants. Passing over the diminished enthusiasm amongst the modern generation of teachers, let me dwell for a while on the fact that the way of teaching has become geared to one objective, passing the student through the so-called matriculation examination. I say "so-called" because by matriculation I understand admittance as an undergraduate to a university or as a trainee to a profession.

Industry has, however, fallen into the deplorable habit of asking that would-be employees be matriculated, and so matriculation has been the necessary qualification for entering commercial life, although in fact it qualifies the student for very little. As a result of this matriculation has ceased to have its original meaning and commerce has defeated its own object by this insistence. So important has matriculation become that not to matriculate is to be cast into outer darkness, and the whole character of teaching has changed to one in which passing the examination is the be-all and end-all.

As I see it, so important has the examination become that all matter extraneous to the syllabus has been cast out, and the broader issues of a wide sphere of education, of creating a thinking and reasoning human being out of the schoolboy have been lost sight of. To the disadvantage of commerce, since they would surely prefer a thinking human being to the unself-reliant product that schools turn out today?

These facts have not escaped notice in America where First-Year Courses now include such subjects as English, other languages, civics, economics, etc. And this as a prelude to a Pharmacy degree!

It would seem that in order to check the high rate of failures in first-year pharmacy examinations, it is necessary to travel full circle and reinstitute the Preliminary Examination in General Education.

Passing on to the results of the Final examination for the Diploma in Pharmacy we find the results somewhat better, but still far from satisfactory. The same reasons that I have already discussed cannot be applied here in toto, since entrants are twenty-one years of age at least, and have been out in the world for some time. Having served their apprenticeship, and so having battled with customers, their powers of expression have been a little heightened, and their intellect a little sharpened.

Can it be that candidates are resistant to the acquisition of knowledge which they know they will, for the most part, never be able to use, or is it that they are just not interested in the technical side of pharmacy? That they cannot make use of some of their technical knowledge is brought about in many cases by force of circumstances, but in most areas there is technical work to be done, if only the chemist can impress upon the medical men that he is the man to consult.

Many candidates are just not interested in attaining more than the basic minimum of pharmaceutical knowledge, and the basic minimum is not enough to pass an examination on. It boils down to the fact that there are many square pegs in round holes in pharmacy, and I am often driven to wonder if the pharmacist is the best man to choose his apprentice. My own idea would be to set up local boards made up of pharmacists, an educationalist and a psychologist, to whom schoolboys would make application to be admitted to the pool of prospective apprentices from which a pharmacist could then pick his apprentice.

Perhaps an intensive course of indoctrination with pharmaceutical ethics might inculcate a pride of profession in the student, although the master is the proper person to so indoctrinate a boy that he will never even



TABLETS *by* ROTARY

The following range of hospital formulae and standard pharmacopoeia tablets is available from Rotary Tableting Corporation Pty. Ltd. at net bedrock quotations.

- | | |
|-------------------------------|---------------------------------|
| *Aminophyllin B.P. | *Pethidine B.P. |
| Aminophyllin Compound | *Phemitone B.P. |
| Amphetamine Sulphate B.P. | Phenobarbitone B.P. |
| A.P.C. Tablets (A.P.F.) | *Phenytoin Soluble B.P. |
| A.P.C. with Codeine | Pyridoxine Hydrochloride B.P.C. |
| Ascorbic Acid B.P. | Quinalbarbitone Sodium B.P. |
| Aspirin B.P. | Riboflavine B.P. |
| Calcium Gluconate | Saccharin Soluble B.P. |
| Codeine Compound B.P. | *Sulphacetamide B.P. |
| Dextro-Amphetamine Sulphate | *Sulphadiazine B.P. |
| *Dienoestrol B.P. | *Sulphadimidine B.P. |
| *Digitalis B.P. | *Sulphaguanidine B.P. |
| *Ephedrine Hydrochloride B.P. | *Sulphamerazine B.P. |
| Ferrous Sulphate Compound | *Three Sulphonamides |
| *Folic Acid | Theobromine Compound |
| Hexoestrol B.P. | *Thyroid B.P. |
| Laxative Vegetable B.P.C. | Vitamin B ₁ B.P. |
| Nicotinic Acid B.P. | Vitamin B Group |
| *Para-Aminosalicylate Sodium | Vitamin B. Group Forte |
| Pentobarbital Sodium | Vitamin E |

* These tablets may be prescribed FREE to the patient under the National Health (Pharmaceutical Benefits) Regulations.

ROTARY TABLETING CORPORATION PTY. LTD.

SPECIALISTS IN THE PRODUCTION OF TABLETS.

The Manufacturing Division of
FAWNS & McALLAN

Melbourne, Sydney, Adelaide, Brisbane, Perth, Launceston.

dream of departing from the pharmaceutical straight and narrow.

Japanese Goods

Glancing down the list of contributors my eye is drawn to an advertisement, "All the winners from Japan," for cameras and optical goods. There seems to be an ever-increasing amount of Japanese ware in S.A., much of which we do not make ourselves. When, however, one sees the quality of some of the goods I am moved to wonder whether we could not produce some of the goods here and in fact export them.

Perhaps if we could do so, we might be in a position to get some of those American cars which clutter up the showroom floors in the States.

Buy South African!

Currently there is a great "Buy South African Campaign" on the go, and not before its time either. There is a kind of snobbery in buying imported articles at enhanced prices. Many of these goods are not entirely suited to S.A. conditions. This is true particularly on British goods, for British manufacturers on the whole tend to produce articles of a pattern which might have found favour with Queen Victoria.

However, in pharmaceutical circles buy South African has for long been almost a must. Most overseas houses have their products manufactured in S.A. and many more would undoubtedly do so, if the technical know-how were available here. Many firms send their concentrates over to be diluted or processed, but there is still much to be done in this direction.

It is still a truism that scientific skill pays little dividend in the form of cash, and until this is so, few chemists are likely to enter manufacturing. Unless the retail market becomes supersaturated, which does not seem possible.

Perhaps in a few years, when the new Dip.Pharm. is established, we will progress in this direction.

PUBLICATIONS RECEIVED

A Review of Productivity in the Pharmaceutical Industry. Pps. 40 with 4 B. and W. plates. Published by British Productivity Council, 21 Tothill street, London, S.W.1. Price 2/3 (sterling).

The British Productivity Council is an organisation set up for the improvement of production, processes and management in British industry. It has recently sent teams—composed of management, technicians and process-operators—from most major industrial groups to the U.S. under the technical assistance programme of the Economic Co-operation Administration (now called the Foreign Operations Administration). Its scope is wide, covering upwards of fifty different groups and including operations as diverse as Cotton Weaving, Cakes and Biscuits, Pharmaceuticals, Provincial Press, Steel Construction, Saving Scarce Materials.

Teams from the United States of America have visited Britain under the auspices of a like American body, with the same object in view, namely, the free interchange of ideas between people in similar spheres of activity.

Although the account primarily concerns the manufacture of ethicals and standard pharmaceuticals, no distinct line has been drawn between pharmaceutical and chemical divisions, since many firms manufacture chemicals for subsequent processing into pharmaceuticals in their own laboratory or factory.

It is only possible in a short review to touch on some of the ways in which avenues towards increased efficiency have been explored and the difficulties (such as the increasing range and variety of pharmaceutical preparations which tend to inhibit the use of modern production methods) which have been encountered. The following extract seems to provide one of the main incentives for improving production methods and so reducing costs and eventually prices to the consumer (which is now chiefly the State):

"In 1948 the State became overnight the industry's largest customer. It has since shown an increasing interest in the price of the industry's products . . . "resulting in the setting up of the Joint Committee on Prescribing in 1949-1950 to consider restrictions on the doctor's power to prescribe"

"drugs and medicines of doubtful value or of unethical character" and

"Unnecessarily expensive brands of standard drugs."

(The committee made no absolute restriction on the doctor's right to prescribe any drug whatsoever, but recommended that it was undesirable that preparations advertised direct to the public should be prescribed.)

The review goes on to report on the Cohen classification of ethicals, which "has not been received with equanimity by the industry," whose main criticism is that such classification may act as a disincentive to research by private concerns owing to the uncertain length of the period during which a new drug of proved value which is not yet standard may remain in the category as "freely prescribable."

The structure of the industry, complexity of marketing arrangements and the export field are commented on at length, as also is Group action which, in a booklet of this type, is of more than passing importance. Here is quoted a portion of this section:—

"The Productivity Team was the first attempt by the industry at inter-firm collaboration on a large scale. Apart from the Team's Report, which made many recommendations of value to the industry, the preliminaries of the visit, and especially the tour of British factories undertaken by the Team before its departure to the U.S., created a precedent of co-operation.

Several of the Team's recommendations advocated a greater interchange of information between British firms, particularly on packaging problems. The committee set up by the A.B.P.I. to review the Report and consider possible action decided, however, that these (and in fact the majority of the recommendations) could be implemented only by individual management, although the association offered to act as a clearing house for information on equipment.

Thus, no formal schemes have been undertaken to enable new ideas and methods to be disseminated through the industry. Largely because of the impetus given by the Productivity Team, informal contacts have increased, a few concerns having developed a sufficiently friendly relationship with each other to permit exchanges of advice on technical problems and even the sharing of production capacity. But these dealings are still mainly confined to firms of the same calibre. The need still exists for the pooling of experience between large and small manufacturers.

Adaptations of standard machinery by individual firms and the layout and organisation of packing de-



MORE AND **MORE** CUSTOMERS
WILL BE ASKING YOU FOR . . .

PETAL Soft



**WITH COTTON WOOL SOFTNESS
AND DOUBLE-PLY STRENGTH**

. . . Carnation Toilet Tissue is ideal for babies—
for children—for mothers—for those with delicate
skin. It's Australia's really soft toilet tissue.

COMPLETELY WRAPPED FOR EXTRA PROTECTION

ORDER NOW, from any wholesaler throughout Australia

Proprietors: Muir & Neil Pty. Ltd., Sydney and Melbourne.
Brisbane Dept.: 229 Adelaide Street.

CARNATION *Toilet Tissue*

PENICILLIN

GLAXO

The name of *GLAXO* has been inseparably linked with penicillin and streptomycin since their introduction. Careful control during manufacture and years of research have made it synonymous with purity and potency.

The wide range of Glaxo presentations of these antibiotics, either separately or in combination, provides adequate means to combat most infections.

When ordering penicillin or streptomycin ensure that you receive the highest quality by adding the suffix *GLAXO*.

STREPTOMYCIN

GLAXO

GLAXO LABORATORIES (AUST.) PTY. LTD., MELBOURNE AND SYDNEY

partments are two obvious examples of matters of common interest to almost all companies. A subject on which comparison of individual practice might also prove advantageous is the methods employed for sampling production for chemical analysis. Quality control is, of course, literally of vital importance in the pharmaceutical industry; the utmost care must be exercised at all stages of manufacture.

Nevertheless, the need for frequent chemical analysis is an undoubted brake on production. Since there are variations in the practice of individual firms, as regards both the method and frequency of sampling, it might be of benefit if the minimum amount of inspection consistent with safety and a satisfactory product were to be established.

As will be indicated in following paragraphs, there are many other fields in which collaboration might be of value. Despite varying circumstances, which would prohibit close copying of techniques and methods, ideas are to be gained in almost all factories that would be of help to the industry generally."

Metric working, which has in recent years been introduced generally in manufacturing and wholesale houses in England, receives appreciable comment:

"... At least one group action of the greatest possible value arose directly from the Productivity Team's Report. This was the recommendation of the A.B.P.I.'s Productivity Committee in January, 1952, that liquid galenicals should be sold by volume instead of by weight, and that solids, liquid galenicals and pharmaceutical chemicals should be sold by metric weights and measures. ... The change to metric operations has presented many difficulties ... customer resistance has had to be overcome, many among the older generation of doctors and retail chemists being disinclined to depart from their accustomed methods of ordering.

Because of this last difficulty in particular, although originally most firms in the industry followed the A.B.P.I.'s recommendation, some concerns have since rescinded their decision. ... But these difficulties may be expected to diminish with the passage of time. The change to metric working and the sale of liquids by volume is undoubtedly one of the biggest steps towards more efficient production taken by the industry."

Specialisation and the reduction in the range of a firm's products, as well as the ruthless pruning of the number of different sizes of one product, are recommended wherever possible as providing a partial answer to the industry's problems, but here again difficulties arise, as is indicated in the passage below:

"A further factor limiting specialisation is the rapid advance of medical science. Some three-quarters of the pharmaceutical preparations sold today were unknown 20 years ago, and many new or improved medicines appear each year. Plainly it would be impossible for a manufacturer to reduce his range of production to a small number of drugs which might at any time be suddenly superseded by new and totally different remedies.

Nevertheless, an increasing trend towards specialisation is apparent in the industry. It has been hastened by the high cost of installing and operating plant for the production of synthetic drugs and by intensified competition in the market for standard pharmaceuticals.

Many of the larger and more successful firms have ruthlessly pruned their sales catalogues, eliminating uneconomical products which had hitherto been subsidised by more profitable lines. And even in some more conservative concerns the pressure of the production sections for a reduction of the range of manu-

facture is beginning to make an impression against the resistance of sales departments.

Similarly, many firms—particularly where work study has been applied in packing sections and the true cost of packaging operations established—have both simplified the design and construction of packs and reduced the number used for each product. The practice of preparing pharmaceuticals in customers' packs is also gradually being discontinued, with great benefit to productive efficiency."

An indication of the trends in modern pharmaceutical production methods is well underlined by the following extract from the section dealing with equipment for production:—

"So important is the engineer's skill in the industry today, in fact, that Pharmaceutical Engineering is now a subject for the Honours Degree in Pharmacy at London University. ..."

The booklet also broadly analyses Planning Production, Standard Costing, Work and Method Study, Packaging, Machinery and Materials Handling, Labour and Productivity, Incentive Payment, etc., while the Appendix gives details of the 19 companies (all of world-wide repute) which were arbitrarily selected as case studies for the Productivity Team before their U.S. visit.

Unassuming in appearance, but large in its approach and coverage, this Productivity review would be a wise investment for any pharmaceutical manufacturer or wholesaler, large or small.—F.H.B.

The Pharmacy Student, 1955.—The official publication of the National Union of Pharmaceutical Students of Australia, "The Pharmacy Student," 1955, maintains the high standard set by its predecessors. It is well presented, and much of the subject-matter contained in its 64 pages is of interest to both student and pharmacist.

The critical approach to the vexed questions of apprenticeship and the complexity of educational systems in pharmacy is a welcome sign that the enthusiastic spirit of pharmacy is very much alive. Dissatisfaction is a prerequisite for change—which, when it is made, will be, one hopes, to the benefit of pharmacy as a whole.

Again the international nature of studentship and of pharmacy is underlined, as witness the following articles:

Bridgeheads to Peace (Asian Students in Australia).
Pharmacy in South Africa.
Pharmacy in Southern California.
Pharmacy Student International.

This short review would not be complete without an example from the robust humour which is scattered through the pages of the magazine:

"Pat was very troublesome. They had tried Mag Sulph. and Ol. Ricini, but without effect. Finally the Resident gave him Croton Oil, 30 minims. Next morning he asked the sister if it had any action.

"Yes," she replied, "once before he died and twice afterwards."

And a definition to supersede any previous definition is: "*Dysentery*—Jet-propelled fluid drive."

The time spent in reading the Pharmacy Student is always time well spent. Congratulations to all those who make it possible.—F.H.B.

Trade Notes

Mr. G. Booth has joined the New South Wales staff of Boots Pure Drug Co. (Aust.) Pty. Ltd., and will cover city and suburban areas.

HAEMAGGLUTININ ALUMINIUM PHOSPHATE ADSORBED (H.A.P.A.)

Manufactured by the Commonwealth Serum Laboratories at Parkville, Victoria, the above product is an aluminium phosphate adsorbed extract of H. Pertussis, claimed to be highly efficient in producing antibodies to that bacterium. It contains Aluminium Phosphate floccules 10 mg. per ml. in saline, with Thiomersal as preservative.

Supplies are available in ampoules of $\frac{1}{2}$ c.c. and 5 c.c.

NYAL COMPANY'S MERCHANDISING MANAGER GIVES PHARMACY MODERNISATION TALKS IN QUEENSLAND

The Nyal company's Merchandising Manager, Mr. Bert Bryant, recently completed a comprehensive nine day tour of Queensland by air and road organising Pharmacy Modernisation discussions for the benefit of local pharmacists.

A total of 203 chemists and assistants travelled from the surrounding districts to five key centres: Brisbane, Toowoomba, Cairns, Rockhampton and Townsville. These chemists viewed Kodachrome slides of some of Australia's most modern and attractive pharmacies.

Each evening ended with an excellent supper and liquid refreshments, against a background of informal discussion.

NEW ZEALAND MANAGER VISITS NYAL HEAD OFFICE

Mr. Os. Osborne, still remembered by many Queensland chemists through his days as a Nyal representative in that State, and recently appointed Manager of Frederick Stearns & Company in New Zealand, dropped into the Australian Head Office early in November on a flying visit.

Besides renewing old friendships and reporting on the buoyant business conditions in New Zealand, Mr. Osborne had a busy time with the company executives discussing sales, merchandising and advertising plans for the coming sales year.

As in Australia, the New Zealand management again predicts that pharmacy will make an even greater number of profitable "chemists' only" Nyal sales in 1956 than they did in 1955.

DEATH OF MR. R. G. SCAMMELL

Mr. Robert Gray Scammell, a director of F. H. Faulding & Co. Ltd., died at a private hospital in Adelaide on the morning of December 6.

Mr. Scammell was a grandson of the late Luther Scammell, one of the founders of F. H. Faulding & Co. Ltd., and a son of the late Luther Robert Scammell, who was managing director for many years.

Mr. R. G. Scammell joined the company in 1907 and was appointed to the board of directors in 1916. He was

well known in wholesale druggist and pharmaceutical circles. From 1911 to 1913 he spent two years in Sydney with his brother, Mr. A. F. Scammell, to establish the company there.

Mr. Scammell leaves a wife, three sons, Messrs. W. F. D. R., and J. F. Scammell, and one daughter, Mrs. J. Matthew.

Mr. A. F. Scammell, chairman and managing director of F. H. Faulding & Co. Ltd., is an elder brother. He and his late brother were members of the third generation controlling the business.

The late Mr. R. G. Scammell was cremated privately on December 9.

P.A.T.A. OF N.S.W.

Notified 5/12/55—

Chemists' Section: Alterations

Size	Retail	Wholesale
		Amolin Laboratories—
		Am-o-Lin Healing Cream.
		Parcel Advantage: £4
		parcel (lots of 3 doz.
		No. 1 and 1 doz.
		No. 2), 5% discount.
		Effective as from
		January 1, 1956.

General Section: Alterations

D.H.A. (N.S.W.) Pty. Ltd.—

4 oz.	4/11	Virol	39/- doz.
8 oz.	6/4	Virol	57/- doz.
16 oz.	10/-	Virol	90/- doz.

PRESCRIPTION PROPRIETARIES CARD SERVICE.

The 15 cards issued recently for the month of December, thus concluding the series for 1955, dealt with the following products:—

A : 101	Acylanid Ampoules
A : 102	Acylanid Tablets
A : 103	Adephos
C : 112	Cardoserpin
C : 113	Cardoserpin with Phenobarbital
C : 114	Compocillin
C : 115	Chlorocort Eye Ointment
D : 76	Di-Sipidin
D : 77	Deltastab Tablets
E : 51	Erythrocin Filmtabs
E : 52	Entacyl Suspension
N : 56	Nidar Tablets
N : 57	Noludar
O : 22	Omnivite Forte
P : 144	Perihemin

Subscriptions (£3/3/-) to the P.P. Card Service for 1956 (including Index Book) are being received now. Renewals or new subscriptions, accompanied by cheque, should be addressed to The Manager, "The Australasian Journal of Pharmacy," 18-22 St. Francis street, Melbourne.

A few sets of the 1954 cards (£3/3/- per set) are on hand and we also have a moderate supply of cards of 1955 (£3/3/- per set) for the assistance of new subscribers who wish to give their library of references a twelve months' start. We regret the cards of earlier years—1951, 1952 and 1953—are now out of print.



A creosote lamp, burning by a child's bedside, was once used to cure whooping-cough.

Taking the whoop out of whooping-cough

Do you remember the little creosote lamp which burnt beside your bed when you were a child?

You were too young, perhaps, to know that your mother had placed it there so that its vapours would penetrate the room and stop the alarming "whoop" which gives whooping-cough its name.

The little lamp which burnt like a beacon in the night has now vanished: Medical science has found an antibiotic* which, when given orally,

kills the whooping-cough virus, and speeds recovery.

OIL-BASED SOLVENT. — The drug is made synthetically in Australia. Shell laboratories are supplying the oil-based solvent necessary for the manufacture of this major life-saving drug.

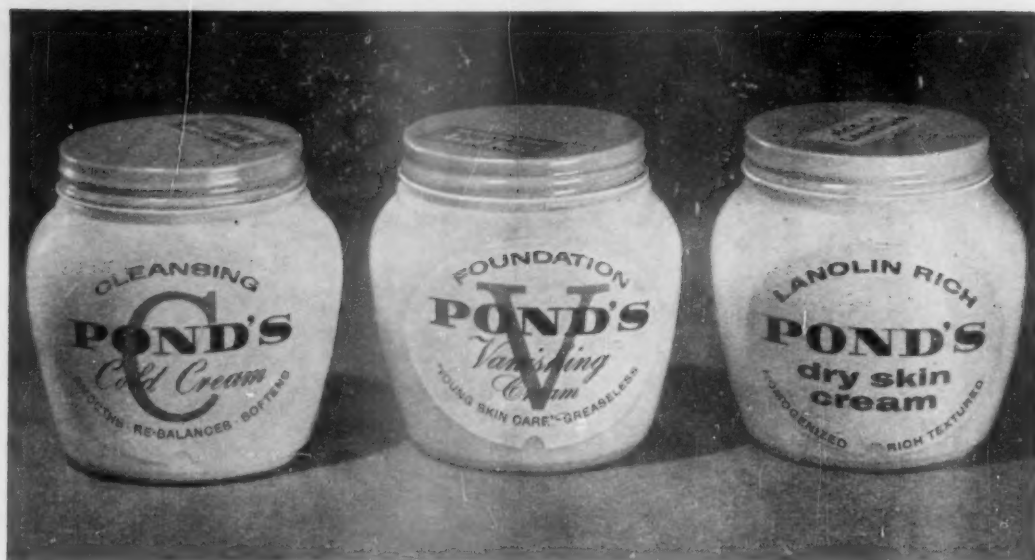
This is just one of the many ways in which **SHELL** are helping doctors in their fight against disease.

*Chloromycetin



NOW! POND'S INTRODUCES ECONOMY SIZE CREAM JARS

— more Appeal to Customers means bigger profit to **YOU**



Famous Pond's Creams now have even more appeal for your customers. The new economy size jars (approx. 4-oz. capacity) feature smart, attractive labels

— elegant shape, and give you bigger unit profits. Add these new size jars to your existing Pond's Creams range today.

Here's how to get quantity discounts

EXTRA PROFITS

Purchase your Pond's Creams in larger quantities and get the following discounts:

6 doz. Assort. Parcel Pond's
— less 2½%

12 doz. Assort. Parcel Pond's
— less 5%

CHESEBROUGH-POND'S INC.

Distributors to the trade:
P.C.D. Pty. Ltd., Box 21, Oakleigh, Vic.

New jar — New prices — New profits

CREAM	Price to Retailer	Price to Consumer
Pond's Vanishing Cream	51/6 doz.	6/9 each
Pond's Cold Cream	51/6 doz.	6/9 each
Pond's Dry Skin Cream	62/11 doz.	8/3 each

Commonwealth and State News

COMMONWEALTH

PERSONAL and GENERAL

PHARMACEUTICAL BENEFITS IN "APPROVED HOSPITALS"

Sir Earle Page Promises Inquiry

If a promise given by Sir Earle Page, Commonwealth Health Minister, to Mr. Hugh Leslie, M.H.R. (C.P., W.A.), in the House of Representatives on October 27, confirms allegations that some "approved hospitals" under the pharmaceutical benefits section of the National Health Act are contravening the law relating to the supply of benefits, it will mark a significant point in a campaign by the Guild and Pharmaceutical Societies which has lasted for several years.

Because of its importance to the profession as a whole, we print below the verbatim report of Mr. Leslie's remarks and of Sir Earle Page's undertaking to inquire into Mr. Leslie's statements.

Mr. Leslie, a returned serviceman of World Wars I and II, who was severely wounded at Tobruk, has been since its inception a member of the Menzies Government's sub-committee on the national health plan.

The following report is taken from Commonwealth Hansard (No. 18, October 27, 1955, pp. 2041-2042). It is part of the debate on the National Health Bill, 1955, explanatory notes on the clauses of which were published last month ("A.J.P.," pp. 1291-2-5, 30/11/55).

MR. LESLIE (Moore).—I wish to refer to Clause 28 of the Bill, which seeks to make a very minor amendment to Section 94 of the principal Act. This section lays down the conditions under which the Minister will approve hospital authorities under the provisions relating to pharmaceutical benefits. Upon application by a hospital authority, the Director-General of Health may, in his discretion but subject to Sub-section (5) of Section 94, approve a hospital authority for the purpose of its supplying general pharmaceutical benefits. Sub-section (5) provides—

A hospital authority shall not be approved under this section in respect of a hospital unless the dispensing of drugs and medicinal preparations at that hospital is performed by or under the direct supervision of a medical practitioner or pharmaceutical chemist.

In approving a hospital authority under the Act it is mandatory that Sub-section (5) shall apply. The Director-General must satisfy himself that the dispensing of drugs at an approved hospital is or will be carried out under the supervision of a medical practitioner or a fully qualified pharmaceutical chemist. I direct the Minister's attention to the fact that this provision is not being observed. I am rather concerned about it, and I ask him whether he will consult with departmental officers with a view to ensuring that this provision of his own law is being adhered to. This is most necessary for a number of reasons, the main one being the preservation of the safety of patients. The present position, which has prevailed for quite a long time, is that medicines and drugs are supplied to country hospitals from a bulk store, which is maintained in the city by State Governments. Mixtures and prescriptions are prepared there, undoubtedly under qualified pharmaceutical supervision, but upon receipt by country hospitals they are dispensed

to patients from the local bulk supply in accordance with doctors' orders or prescriptions. This practice might have been quite all right in days gone by, when it was customary to give patients medicines which, if they were not beneficial, were at least of an innocuous nature. I refer to cough mixtures and preparations like that. Today, however, the development of medicine has progressed at a terrifically fast rate, and we have antibiotics which, I should say, have a sudden effect one way or the other. They either cure or kill, and one cannot afford to take the risk of a wrong pill or tablet being administered to a patient. This risk is rendered greater because so many pills, capsules and powders are almost identical in colour and make-up. It is quite easy for a nurse in a hospital to take from a bulk supply on a shelf a bottle containing the wrong drug, and administer the contents to a patient, possibly with dire consequences. Some years ago, in the 'thirties, there was quite a furore in New South Wales because accidents like that had happened, and some attempt was then made to stop the dispensing of medicines at hospitals except under skilled supervision. That happened when we had relatively harmless types of medicines. Today the risk is much greater. I have no objection to hospitals being supplied with drugs from Government bulk stores, but for the safety of patients those drugs must be dispensed in a way which will ensure that the patients do not face the risk of being administered a wrong capsule or pill. I ask the Minister to examine that matter and ensure that the law is being observed. I know that the States are the worst offenders in this regard.

SIR EARLE PAGE.—I give the honourable member for Moore (Mr. Leslie) that assurance. I shall discuss the matter with my officers and with the State Governments.

THE MADE IN AUSTRALIA COUNCIL

Window Display Design Competition

Points from the judges' comments on the winning entry:—

Method of presentation was good.

Quickly appreciated, and easy to follow the concept.

The design or lay-out was considered very good.

The preparation and balance were excellent, with no confusing side issues or unnecessary props or equipment.

The colour sense was not quite adequate, but on the other hand the technique was very good.

The designer showed himself to be a capable artist, and letterer, with adequate knowledge of techniques involved in the preparation of visual sketch.

The presentation of the design was by far the best entered, revealing a wide knowledge of techniques involved in relation to product display, design and construction of requirements.

The attraction value showed that the display could be used for both purposes, either as a background to product displays, or as a solus display.

The message was immediately apparent, coherent and quickly assimilated by a passerby.

Full concentration on interpreting the message specified, which was "BUY AUSTRALIAN."

WESTERN AUSTRALIA

PERSONAL and GENERAL

State News

Members desiring publication of personal items of interest are invited to write or telephone details to the Journal Correspondent in W.A., Mr. F. W. Avenell (phone BA 4082).

Mr. B. A. Maywood has opened a pharmacy at 49 Rockingham road, Hamilton Hill.

Mr. W. T. Harrison has opened a pharmacy at 48 Grantham street, Wembley.

Mr. L. Rapoport, who underwent an operation recently, is making good progress. Mrs. Payne and Mr. W. G. Pickford acted as relievers during Mr. Rapoport's absence.

Congratulations to Mr. and Mrs. H. D. Fitch, whose son Ken passed his M.B., B.S. examination at Adelaide University recently. Ken secured second place in the exam. and first place for W.A. students. He was awarded the Wyeth Prize for Obstetrics.

Mr. R. Davis, who has been Principal of the Perth Technical College for the past 13 years, will retire on December 31, 1955. He was first appointed to the staff of the College in 1910 and, except for a period of absence overseas during World War I, has served continuously at the College since that time. The Pharmaceutical Council has reason to thank Mr. Davis for his valuable co-operation in pharmaceutical education matters.

Wedding.—Congratulations and best wishes to Mrs. Reynolds, formerly Miss Betty Mackintosh, who was married on November 15.

Examination "Howler".—"A miotic is a purple contractor."

EXAMINATION RESULTS

Entrance Examination Results.—The following candidates passed the Entrance Examination:—

S. Benn, K. A. Bogue, M. D. Cann, P. G. Cook, I. K. Davie, B. C. Dukes, S. A. Garbellini, Lola May Giles, E. D. Hogben, B. E. Hopkins (Faulding £10 Bursary), J. R. Hubble (Faulding £5 Bursary), J. P. Inglis, A. R. Jackson, K. G. Manolas, G. B. Mencinsky, M. V. Nora, H. A. P. Panizza, Eunice Irene Taylor, K. F. Vale.

Results of Other Examinations were not available when this issue closed for press.

PIONEER CHEMIST KILLED

It is with much regret that we report the death of Mr. John Henry Tindale, of Guildford, aged 85. Mr. Tindale was one of the oldest pharmaceutical chemists in Western Australia. His name was on the first Pharmaceutical Register published in 1892. For some years Mr. Tindale conducted a pharmacy at Guildford until his retirement.

Mr. Tindale was crossing the road outside his home on November 14, in the late afternoon, when he was knocked down by a car. He was taken to Royal Perth Hospital, but, unfortunately, died several hours later.

P.D.L.

W.A. BRANCH ANNUAL MEETING

The annual meeting of the W.A. Branch of P.D.L., held at Perth Technical College on December 8, at

2.30 p.m., attracted a small attendance of members.

Minutes of the previous annual meeting were confirmed, and special correspondence was dealt with.

Financial Statement and Auditor's Report were presented by the Treasurer, who drew attention to the surplus of £198/17/5 for the year. This was stated to be a record for the Branch.

The Annual Report, as printed and circulated, was formally adopted, reference being made to the new record membership of 206.

Election of Local Board.—The Secretary reported that nominations had been received for Messrs. H. D. Fitch, R. I. Cohen and A. A. Baxter, who were declared elected.

Chairman: Mr. H. D. Fitch was re-elected.

Treasurer: Mr. R. I. Cohen was re-elected.

Representative to Federal Council: Mr. H. D. Fitch was re-elected. Mr. N. C. Cosser was re-elected as Proxy Representative to Federal Council.

Delegate to P.A.A. Conference: Mr. H. D. Fitch was re-elected.

Agreement with M.L.C.—The Secretary intimated that Mr. Justice Browne had resigned on account of ill-health and Mr. George Muggeridge had been appointed to transact M.L.C. business in association with P.D.L. in the metropolitan area. Country district policies would be dealt with by the local representatives.

Thanks to Staff.—The meeting expressed appreciation to the staff for their services and co-operation throughout the year.

The meeting closed at 3.25 p.m.

PRESCRIPTION MEDICINE IN THE PRACTICE OF DENTISTRY

By Dr. J. B. Edmonds

In recent years, there has been shown an increased interest in dental pharmacy. There has also been evidence of a greater interest on the part of the dental profession in the proper use of drugs in dentistry. The Council on Dental Therapeutics is very active in this respect.

The dentists have recognised that the pathology of the mouth is quite variable in character and that a preparation which is beneficial in one case is not necessarily effective in another. By prescribing an individual medication for the patient, specifying the exact drugs in such concentrations as are deemed advisable for the particular case and giving proper directions for use, and by subsequent examination of treatment progress, new prescriptions can be written as pathological conditions change. In this way, the patient receives the benefit of the professional training of both the dentist and the pharmacist, and much better results may be obtained than could ordinarily occur in a process of self-medication with a package preparation.

The pharmacist, with his special knowledge of the physical, chemical and therapeutic properties of drugs, is in a very valuable position to render the same type of service to the dentist as to the physician.—From "South-Eastern Drug Journal," U.S.A., October, 1955.

For the treatment
of pernicious and
secondary anaemia



CAMPOLON

TRADE MARK

BRAND OF INJECTABLE LIVER EXTRACT

CAMPOLON contains all the necessary factors of liver including Vitamin B₁₂.

CAMPOLON FORTE contains a minimum of 20 microgrammes Vitamin B₁₂ per ml.

Administration of Campolon is followed by a prompt and satisfying change in the blood picture, while the patient's general condition shows a parallel improvement.

Indicated in pernicious, secondary and nutritional macrocytic anaemias, sprue.

CAMPOLON

Crude Liver Extract (2 U.S.P. units per ml.). Ampoules of 2 ml. and 5 ml., vials of 10 ml.

CAMPOLON FORTE

Concentrated Liver Extract (15 U.S.P. units per ml.). Ampoules of 1 ml., vials of 5 ml. and 10 ml.

★ *Pharmaceutical Benefits (N.H.S.)*



BAYER PHARMA PTY. LTD.

56 Young Street, Sydney

Distributors:

Salmond & Spraggon (Aust.) Pty. Ltd.
Sydney, Melbourne, Brisbane,
Adelaide, Perth.

4789



For 78 years Rocke Tomsitt & Co. Ltd.

has served the pharmaceutical profession as

manufacturing chemists and wholesale druggists . . .

78 years of experience behind the service you

get when you place your order with "Rockes".

The phone number . . . MU 7551. The address . . . 292-298 Flinders St., Melbourne.

ROCKE TOMPSITT & CO. LTD.

MANUFACTURING CHEMISTS AND WHOLESALE DRUGGISTS SINCE 1877

292-298 Flinders Street, Melbourne

Telegraphic Address: Rocksett, Melbourne.

D190

TASMANIA

PERSONAL and GENERAL

State News

Members desiring publication of personal items of interest are invited to write or telephone details to the Journal Correspondent in Tasmania, Miss M. L. Williams, 275 Argyle St., North Hobart (phone B 1010).

Although Christmas will be over and all will be enjoying a few days' break after the Christmas rush of business and festivity when this issue is read, we take this opportunity of wishing everyone a very happy New Year crammed with prosperity.

Mr. Julian Brown and Mr. Don Stewart, both of Melbourne but working in Hobart, are going back home for the Christmas holidays.

Congratulations and best wishes to Miss Mary Wallace, who will be celebrating her 21st birthday with a "coming of age" dance at the Continental.

The members of Sidwell and Townley celebrated Christmas nice and early with a picnic at Seven Mile Beach, followed by a picture party and supper.

Miss Anne Wilkes went to Melbourne in October to be bridesmaid to Miss Margaret Edgerton, who was married to Mr. Jim Fairbourne. Margaret spent some time working in Hobart last year.

Final Passes.—Congratulations to Miss Margaret Purdon, Mr. A. L. Moore and Mr. Brian Shireffs, all of whom passed in the Final Examination in November. We wish them every success in the future.

PHARMACY BOARD

Monthly Meeting

The Pharmacy Board of Tasmania met at 85 Elizabeth street, Hobart, on November 21, at 8 p.m.

Present.—Miss M. L. Williams, Messrs. A. G. Gould, E. H. Shield, J. M. Beaumont, I. B. McLeod and Registrar.

Chairman.—In the absence of Mr. Pearce, Mr. A. G. Gould was elected to the chair.

Pharmaceutical Register.—Shirley Margaret Shannon: Certificate of Identity and Certified Photograph were received from the Pharmacy Board of Victoria.

Akos Nagy: A letter was received from Mr. Nagy, setting out qualification he had gained as a pharmacist, including his degree from the University of Sciences at Budapest in 1939, and also listing the practical experience he had had in Europe and in Australia. He arrived in Australia in November, 1950.—The Registrar reported that these details had been submitted to Dr. Polya, who had provided a written report, stating that the course which Mr. Nagy had taken would be at least equivalent to the Pharmacy course in Tasmania.

After discussing these details, the meeting decided that Mr. Nagy would be registered as a Pharmaceutical Chemist in Tasmania after he had satisfied our Examiners in the Final Examination in Forensic Pharmacy, Prescription Reading and Dispensing, together with the serving of a period of 12 months in an open pharmacy in Tasmania.

Pharmacy Course.—The Registrar reported that the proposals submitted by Dr. Polya for bringing the Tasmanian Pharmacy course within the University had been submitted to both the Pharmaceutical Society and the Guild, where it was decided that this matter should be considered by the Liaison Committee.

Finance.—The financial statement showed a balance of £724/1/9. Accounts totalling £127/4/4 were passed for payment.

Examiners' Fees.—After discussion, the following rates were approved:—

Dispensing: £5/5/-.

Oral or Accreditations: £1/1/-.

Written Paper: £3/3/- for up to six candidates and 10/6 per candidate over six.

Ministerial Head.—A letter was received from the Chief Secretary's Department, advising that the administration of the Pharmacy Act 1908 and the Poisons Act 1916 had been committed to the Hon. R. J. D. Turnbull, Minister for Health.

Poisons Act:

Eight Schedules.—The meeting approved of the eight schedules presented at the previous Board meeting, subject to some quantities being checked by Mr. McLeod.

Veterinary Antibiotics.—A letter was received from the Chief Veterinary Officer, asking what action had been taken by the Poisons Sub-Committee of the Board in relation to the control of these drugs. The meeting decided to advise Mr. Meldrum that after gathering information from all other States and New Zealand the matter was handed to the Parliamentary Draftsman for drafting of the legislation, as was recently passed, amending Regulations 11 and 12.

Steprac.—Members decided that this dry cleaning pack was not subject to control in Tasmania, and the Board would be agreeable to labelling as required in Victoria.

A letter was received from Wilfrid Owen (Australia) Pty. Ltd. regarding an anti-insomnia tablet. The meeting decided that these tablets did not require the restriction of prescription only, so long as they were labelled "poison."

Mustine Hydrochloride, B.P. (Nitrogen Mustard).—The Registrar reported that he had spoken with Dr. K. J. Friend regarding this matter, and he advised that this item was considered to be highly dangerous and should only be used under medical supervision.—The meeting decided that it should be included in part 1 of the First schedule of the Poisons Act, and also in Regulation 9.

Advice was received from the Attorney-General's Department that the person who had reported the excessive use of Morphine in cough mixtures was not prepared to have his name disclosed. It, therefore, was not possible for the Board to take any further action.

Consideration was also given to the restriction of Ephedrobarbital tablets referred to in this letter, and members decided that the present control was adequate.

Returning Officer.—The appointment of Mr. E. H. Shield as returning officer for the forthcoming election was ratified by the meeting.

The meeting closed at 9.45 p.m.

SPECIAL MEETING OF THE PHARMACY BOARD

A Special Meeting of the Pharmacy Board of Tasmania was held at 85 Elizabeth street, Hobart, on November 24, at 8 p.m.

Present.—Miss M. L. Williams, Messrs. A. G. Gould, I. B. McLeod, J. M. Beaumont, E. H. Shield and the Registrar.

Chairman.—In the absence of Mr. Pearce, Mr. A. G. Gould was elected to the chair.

Examination Results: Final Examination.—Mr. Gould presented the recommendations of the Examination



WHITE COATS

LADIES' UNIFORM

In Pre-shrunk Drill
S.S.W. to W.
and O.S.

THIS STYLE

In British
Pre-shrunk Drill
Available for
Immediate delivery
Sizes 3 to 8
And ½ Sizes

CROWN WHITE COATS

SHOWROOMS:

MELBOURNE: VIC. BROOKSHAW, Howey Court, 234 Collins Street. Phone: MU 5229.

ADELAIDE: K. MACKENZIE, 9 Compton Street. Phone: LA 3180

HOBART: H. T. GROUNDS, 152a Collins Street. Phone: B 3511 - B 2370.

TASMANIA—Continued

Committee for the November Examinations. The meeting approved that the following be granted:

New Syllabus: B. Shirrefs, pass in all subjects.

Old Syllabus: Miss M. Purdon, pass; Miss M. Wallace, exemptions in Prescription Reading, Organic Chemistry and dispensing; D. G. Allen, exemptions in Prescription Reading and Pharmacy; A. L. Moore, pass; I. R. McIntosh, exemptions in Posology and Toxicology, and Prescription Reading; M. Augustoskas, exemption in Prescription Reading.

The remaining candidates were referred to their studies for a further period.

Accreditations: Pharmacy I.—The following candidates were granted passes: Miss D. Allen, M. G. Cooney, G. D. Rouse, D. O. Chellis, G. Conrad.

The remaining candidates were recommended to sit for the Supplementary Examination.

Pharmacy II.—Passes granted to Miss Y. Atkins, D. M. Tremayne.

Candidate No. 786 (J. K. Bester) was recommended to sit for the Supplementary Examination.

OUT OF THE PAST

Into our hands has come a copy of a small publication, "Letters from Andrew Crewdson (Pharmacist) to his son Andrew Crewdson, Jnr. (Apprentice)" published and distributed by Glaxo Ltd. some years ago.

The twelve letters in the series are described as being "a conscientious endeavour on the part of a father to lead his son into the path of success and happiness." Although punctuated with some moralising of the nineteenth century flavour and with here and there a modest advertising puff for Glaxo, the letters make interesting reading and much of the advice could quite readily be given today by a hard-headed older man, as Andrew Crewdson signs himself in one of the letters to his son.

Much of the letters is taken up with comments on advertising, from which the following selections are quoted:

"Advertising is a modern method of selling goods—it is salesmanship by written word."

"All forms of salesmanship are advertising, but selling by written word is much cheaper than selling by salesmen."

"Effective advertising by written word so increases turnover that the economies made both in sales expenses and production costs are more than sufficient to pay for the advertising expense."

"Advertising still remains the strongest single factor I know to make sale, but the chemist must realise that advertising is his servant, not his master."

"Without turnover there can be no profit and the speed with which it can be done is a test of merchandising skill, provided the chemist is making a profit and conducting his business with judgment and common sense."

"If advertising fails to accelerate turnover it is economically unsound—but advertising does sell goods more quickly."

This Andrew Crewdson foresaw the need for application of sound business principles and the organisation of pharmacies as commercial undertakings, later to be developed by such organisations as the National Pharmaceutical Union and The Federated Pharmaceutical Service Guild. In letter No. 12, he advises: "My lad, you have a shop on the street—do not restrict its operation: other traders allow no false sentiment to restrict their activities, and if you are going to cater for the sick man only you are missing much profitable trade."

Have you
considered
IMPLANTATION

in inoperable mammary carcinoma★

Simple
Effective
Economical

A single
implantation
is sufficient
for eight months

In cases where a continuous supply of hormone is indicated, administration by fused, crystalline implants is simple, effective and economical. Implants of especial value in mammary carcinoma and a single implantation is sufficient for eight month's supply of hormone. Literature gladly sent on request.

★ PRESCRIBABLE UNDER P.B.A. S.2—ORGANON, TESTOSTERONE IMPLANTS 100mg., 150mg., 200mg.



ORGANON LABORATORIES LTD., LONDON

Sole Australian Agents:

BRITISH PHARMACEUTICALS PTY. LTD.

8-12, BATHURST STREET, SYDNEY, N.S.W. (BOX 3967 G.P.O.)

Box 232, OV. G.P.O., Melbourne.

Box 1162/P. G.P.O., Brisbane.

P.O. Box 845, Adelaide, S.A.

Box 51549, G.P.O., Perth, W.A.

**Ads like this
are working for
—YOU!**



Five days of new freedom

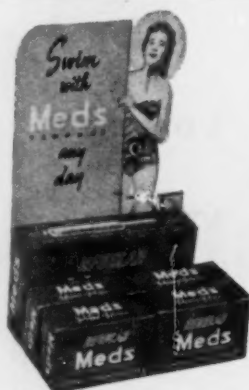
The Secret of going Anywhere, doing Anything—
Any day of the month is known to countless
thousands of women who have discovered Meds.
Meds—the safer, softer tampon that means
no belts, no pins, no tell-tale outline.

Want to know
more of Tampons?

Our **FREE Meds book** tells you all about internal
sanitary protection. Write for your copy to Nurse Reid,
Johnson & Johnson, Box 3331, G.P.O., Sydney — It
will help you towards greater comfort and enjoyment.



PRODUCT OF JOHNSON AND JOHNSON



The Meds Dispenser Unit is
specially designed to act as
a point-of-sale reminder, and
to make Meds buying easier.
Displayed on your counter, it
will increase your sales.

Get your share of the swing to Meds

1955 will be the biggest year in Meds history. Already, everywhere, more women
are discovering the "Five Days of New Freedom" that Meds so safely ensure. Take
advantage of this greater-than-ever demand. Display Meds prominently. Recommend
them.

● INTENSIVE YEAR-ROUND ADVERTISING

Day after day, week after week, every woman throughout Australia will be con-
stantly reminded of the new freedom Meds provide. All popular Women's Magazines
will feature frequent advertisements.

● FREE EDUCATIONAL MEDS BOOKLET

Interest created by Meds advertisements will be consolidated by the offer of free,
educational Meds Booklets—containing important information and advice prepared
by competent Medical Authorities.

A PRODUCT OF JOHNSON & JOHNSON
THE MOST TRUSTED NAME IN SURGICAL DRESSINGS

JJ18 F.P.

NEW SOUTH WALES

PERSONAL and GENERAL

State News

Members desiring publication of personal items of interest are invited to write or telephone details to the Journal Correspondent in N.S.W. Phone BU 3092.

It takes two to speak the truth—one to speak, and another to hear.

—H. D. Thoreau.

Mr. R. E. Welladsen has purchased the pharmacy of Mr. J. R. Strauss at 107 Addison road, Marrickville.

Mr. Charles D. Clifton is the proprietor of the pharmacy at 11 Alexandra street, Hunter's Hill.

Mr. S. Hibbard is the proprietor of the West End Pharmacy, 92 Wollambi road, Cessnock.

Mr. Harold Bingham is opening a new pharmacy at Padstow.

Mr. A. R. Leggott is establishing a pharmacy at Civic Centre, Canberra, A.C.T.

Mr. W. K. Murray has opened a new pharmacy on the Great Western Highway, Kingswood.

Mr. M. E. G. Hammond, of Manly, has taken over the managership of Smith's Pharmacy, Macquarie street, Dubbo.

Mrs. E. E. Jiear, late of Katoomba, is the proprietor of the pharmacy, 199 High street, Willoughby, which she purchased from Mr. G. B. Warren.

Mr. R. A. Rorke is the owner of the pharmacy at 5 Casino street, South Lismore, formerly conducted by Mr. Browne.

Miss L. Y. M. Hermes has purchased the pharmacy at 45a Parramatta road, Homebush, previously owned by Mr. D. G. Ashley.

OBITUARY

It is with deep regret that we report the death of **Mr. Cliff Moody**, of Bathurst, on November 21. It is believed that he suffered a cerebral haemorrhage while driving his car, which plunged into a tree.

The death of **Mr. Reginald Leslie Hittmann** occurred suddenly on November 18, at his residence in Haberfield. He was registered as a pharmacist in 1908, in which year he began tuition for pharmacy students, and he continued in that sphere till his retirement 12 years ago. He was Chief Pharmacist at Balmain Hospital for a period of 40 years.

"Hitty," as he was affectionately known to his colleagues, was respected highly for his knowledge of drugs, and his passing will be mourned by many pharmacists.

He is survived by his wife, his son, Lloyd, and three daughters, Mavis, Gwen and June, to whom we extend sincere sympathy.

DEATH OF MR. DUDGEON

The drug trade in New South Wales lost one of its best-known personalities when **Mr. William Dudgeon** died at the Mater Misericordiae Hospital, North Sydney, on November 4.

"Bill" Dudgeon's last official position in the trade was Manager of the Commonwealth Drug Company Pty. Ltd., of Kippax street, Sydney.

He was born at 14 Oxford street, Sydney, where his father had a chemist's shop for many years. Young Dudgeon first served in his father's business and was later with S. C. Haslam in George street, Sydney.

In 1914 he left the retail side of pharmacy, transferring to wholesale drugs by joining the staff of W. Herman Slade and Company as a field representative. He was deputed to open that firm's Brisbane branch, of which he was the first Manager.

In 1920 he returned to Sydney. For the next three years he was with Elliott Brothers. In 1923 the Commonwealth Drug Company was established and Mr. Dudgeon, appointed as its first Manager, had the responsibility of launching that organisation. Much of its subsequent success was due to his energetic and sound commercial practices and gift for organisation.

He was actively associated with the Drug and Fine Chemicals Division of the Drug Group of the Chamber of Manufactures of New South Wales. A fine tribute was paid him by George Carr, in these words: "Bill Dudgeon's contribution to the development of the drug industry will never be exceeded."

Following a Requiem Mass at St. Michael's Church, Lane Cove, the funeral at the Field of Mars Cemetery was attended by many friends, the drug trade and sporting bodies being represented.

Deceased leaves a widow, two sons and two daughters, to whom the drug trade extends its sincere condolence.

DOCTOR SYDNEY E. WRIGHT

The Degree of Doctor of Philosophy of the University of Sydney has been awarded to Sydney E. Wright, M.Sc. (Queensland), Dip. Pharm. (Sydney), A.R.I.C., for a thesis entitled "The Metabolism of Cardiac Glycosides."

Dr. Wright is Senior Lecturer in Pharmacy at Sydney University. Before his present appointment he was Principal of the College of Pharmacy, Wellington, New Zealand. He previously taught Pharmacy at the Technical College, Brisbane, and also lectured in Chemistry at the University of Queensland.

He has been granted study leave by the University for 1956, and intends to leave for overseas in February, to study pharmacy teaching methods and visit research centres interested in projects similar to those being carried out in the Pharmacy and Pharmacology Department at Sydney University.



Dr. S. E. Wright



IN
CONSTANT DEMAND



- **BCM PLUS**
- **BCM** WITH PHENOBARBITONE AND STRYCHNINE

HEPASOL COMPOUND

- **HEPASOL COMPOUND**
WITHOUT
STRYCHNINE

- **HEPASOL COMPOUND**
WITH
PENTOBARBITAL SODIUM



SYDNEY, AUSTRALIA

NEW SOUTH WALES—Continued

OVERDOSE OF PHENOLPHTHALEIN CAUSED DEATH

The death of an infant following the swallowing of an excessive number of chocolate laxative tablets containing phenolphthalein has received considerable publicity in the daily press during the month.

At the inquest held on November 23, the City Coroner said that the death in the circumstances was almost beyond the bounds of possibility.

Dr. S. Sheldon said he had no doubt the child died from a heavy overdose of phenolphthalein, the drug contained in the tablets. Such cases were very rare.

Professor R. H. Thorp, Director of Pharmaceutical Studies at Sydney University, said that in the past 50 years 100,000,000 doses of phenolphthalein had been consumed in Australia each year. There had been no cases of death in this time indisputably due to this substance.

The Coroner said the boy's death could not be numbered as a million to one chance—it might be classed as the most unlikely of any death.

ZONE MEETING AT PARKES

A well attended Zone Meeting was held at Parkes on November 27, at Tattersall's Hotel. Pharmacists were present from Parkes, Canowindra, Eugowra, Millthorpe, Forbes, Condobolin, Grenfell, Trundle, Bathurst, Dubbo, Orange, Peak Hill, Narromine and Forbes.

Zone members present were—Messrs. J. P. Cooney, F. A. Tierney, C. T. Devitt, C. L. Diamond, K. P. Mullen, R. G. Lamont, R. Flannery, T. Sinclair, T. A. Shanahan, J. Matthews, J. Molony, H. Campbell, J. P. Townley, E. C. Cahill, J. H. Finn, F. A. Goodwin, R. F. Goodwin, E. H. Knight, H. Highley, J. H. Burgess, J. G. Smith, M. E. G. Hammond, J. Payten, W. Norman, J. Finn, H. E. Elks and Miss J. Mearns.

Mr. J. P. Cooney occupied the chair. Official Pharmacy representatives were—Mr. B. G. Fegent, President of the Pharmaceutical Society of New South Wales; Mr. John N. Young, State Branch Committeeman of the Federated Pharmaceutical Service Guild of Australia (New South Wales Branch) and Mr. A. E. Connolly (Secretary).

CATHOLIC CHEMISTS' GUILD OF SAINT FRANCIS XAVIER

At the Annual General Meeting of the above Guild, held in October at History House, Young street, Sydney, a new council was elected for the next twelve months.

Master: E. I. Segrave, 44 Darcy street, Parramatta, (YL 8918).

Deputy Master: Mr. B. Hayes.

Secretary-Treasurer: Carmel Gilchrist (WB 2283).

Roll Secretary: Mr. W. Larkin, 9 Seaview street, Balgowlah.

A general meeting was held at "History House" on December 15, 1955, at which His Honour, Mr. Justice McClellens, was guest speaker.

P.O.A.D. ACT — AMENDED REGULATIONS

The Regulations under the Police Offences (Amendment) Act, 1908, as amended by subsequent Acts, are amended—

(a) By inserting in paragraph (1) of Regulation 11 after the word "transaction" the words "Each such entry shall, inter alia, in the column provided in the register for the particular purpose—

(a) Show the balance of the drugs held by the holder of a license or other authorised person, at the premises where the register is kept, after the transaction to which the entry relates;

(b) Be signed, on the day the entry is made, by the actual dispenser or administrator of the drug."

(b) By omitting Regulations 12 and 13 and the heading thereto;

(c) By omitting the words "(One only, irrespective of strength, to page)" in Schedule 5 and inserting in lieu thereof the words "(One drug, of one trade name and one strength only to page)".

(N.S.W. Gaz., 18/11/55.)

N.S.W. CHEMISTS' GOLF CLUB

Special Christmas Meeting at Cromer Country Club

Once again, a very successful Christmas meeting was held at Cromer Country Club on December 6. The weather was ideal and the day was thoroughly enjoyed by all — a feature of the day was the very pleasing attendance of 110 players.

The golf was followed by a really first-class Christmas dinner in the real Cromer fashion. During dinner, members and their visitors were kept entertained with singing, music, etc., and a very good time was had by all.

Some outstanding scores were turned in, Glen Cuneen winning the A Grade with 39 points off a handicap of 2. To do this he scored 69 off the stick, which is one under the par of the course. It is obvious that the handicapper will be busy making adjustments before the next meeting.

The results of the golf were as follows—

Four-Ball

Winners—Barry Jones (16) and Neil Murray (16), 45 points.

Runners-up—C. Campbell Horsfall (20) and Vera Payne (16), 45 points.

Individual

A Grade—Glen Cuneen (2), 39 points.

B Grade—Doug Ramsay (17), 37 points.

C Grade—Bryan Hay (27), 37 points.

REMARKABLE RECORD IN WINDOW DISPLAY

Ward and Ada, chemists, of Prince street, Grafton, put up a remarkable performance by winning, for the fifth year in succession, the Jacaranda Committee's "designed floral window" award for premises with under 20 square feet display area.

Mr. J. D. Ada said that the firm had won the contest each year since 1951. He produced the awards cards for each year except 1954, which had gone astray.

The theme at Ward and Ada's shop was the celebration of the 21st anniversary of jacaranda, as exemplified by a large birthday cake covered with red and white roses, on which lay a knife tied with jacaranda-coloured ribbon. Immediately fronting the cake was a bottle of champagne and a fragile drinking glass which, in turn, had in front of it, a packet of tablets. This, Mr. Ada said, smilingly, would be for the headache after a wonderful celebration.

As a background were drawings of music, a violin and a bubbling champagne glass and two pink elephants upside down.

The other part of the display featured a large vase of pastel-shaded gladioli, larkspurs and other blooms.

Judge's Comments

The following are judge Russ Tyson's comments on entries and awards—

"Congratulations—all of you who took part. This year the Gay Shop and Gay Shop Staff Contests were a thousand times more actively contested than last year. It has made a tremendous difference to the week's festivities—one can really sense the jacaranda spirit, no matter what type of establishment you walk into.

"However, after a great deal of thought, I felt that the prizes should be awarded as follows—

"Gay Shop (staffs of under six): Harper's Chemist Store.

"Gay Shop Staff (staff of under six): Ward and Ada, Chemists.

"Harper's Store was indeed pretty — a rather taste-

Your Private Formulae Problems Solved

YES—probably the most profitable lines in your Pharmacy both in terms of

MONEY and GOODWILL

BUT

TIME, lack of it, and TROUBLE, plenty of it, is forcing you to wonder whether you can continue with these most valuable ADVERTISING, GOODWILL and PROFIT lines in YOUR BUSINESS.

CONTACT US OR OUR AGENTS

WE SPECIALISE IN PRIVATE FORMULAE SERVICE

VICTORIANS—We will also relieve you of your Registration problems which now exist as a result of the recent publication of the Health (Proprietary Medicines) Act.

Representatives in All States:

QUEENSLAND: S. H. Stewart, Hamilton Street, Brighton, Sandgate, Brisbane. Sandgate 2324.

TASMANIA: H. T. Grounds, 152A Collins Street, Hobart. 6 3511, 8 2370.

VICTORIA: John Kiddell, 458 Beach Road, Beaumaris, S.10. XF 4641, WX 8786, MB 2111.

SOUTH AUSTRALIA: Arthur Searcy & Son Ltd., 138 Grote Street, Adelaide. LA 2891.

WESTERN AUSTRALIA: Geoff Martin & Son, 83 Brisbane Street, Perth. BF 1791.

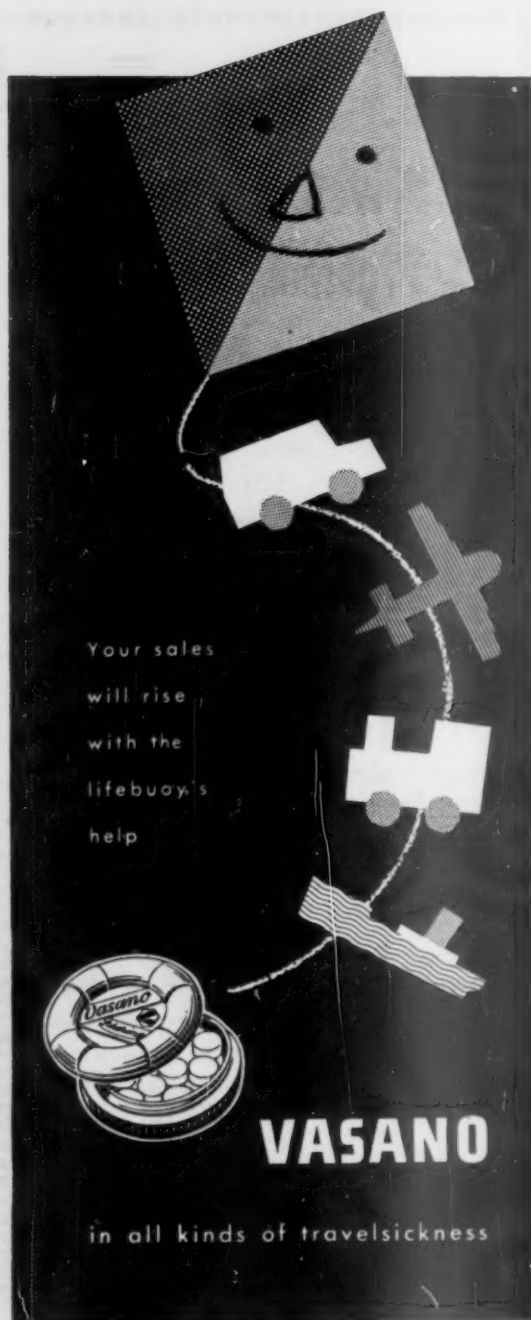
R. D. TOPPIN & SONS PTY. LTD.

Manufacturing Pharmaceutical
Chemists

45-51 Crystal Street,
Petersham, N.S.W.

Phones:
LM 2023, LM 4870

Cable Address:
TOPPINSONS, SYDNEY.



Your sales
will rise
with the
lifebuoy's
help

VASANO

in all kinds of travelsickness

DISTRIBUTORS: SCHERING PTY. LTD. SYDNEY/AUSTRALIA

SCHERING A.G. BERLIN/GERMANY

NEW SOUTH WALES—Continued

fully gay effort this one, with the costumes blending rather neatly into the general decor of the shop itself.

"At Ward and Ada's, one captured the 21st birthday spirit — the manager, as the maitre d'hotel, greeted us formally — but with a twinkle in his eye — and we then met the staff of cooks and waitresses, who were metaphorically dispensing good cheer and mirth from their jacaranda kitchen. The fact that I was not given a piece of birthday cake nearly cost them the award, but over all, I could not go past them."

THE A.P.F. 1955 EDITION LECTURE AT NEWCASTLE

Members of the Newcastle and Hunter Valley Pharmacists' Association met in the pleasant surroundings of the Chamber of Manufactures Hall on November 16, to hear a lecture by Dr. S. E. Wright, M.Sc., A.R.I.C., Senior Lecturer in Pharmacy at the University of Sydney.

The attendance was excellent. A packed room with a number standing. Those present included— Dennis Scott, Bill Palmer, J. L. McCotter, D. Braye, P. W. Fennell, Robert Brady, Elizabeth Lanwick, L. R. Wheeler, H. Musgrove, B. L. Wellham, L. Horne, D. Willis, R. Tayler, I. McFarlane, R. Owens, John David, R. O. Webb, J. Flanagan, B. W. Lobb, D. H. Leishman, P. Giles, W. E. Robertson, P. Wilson, C. Israel, Russell Ross, Shirley Attwood, Joan Farrell, Claire Farrell, John Turner, Lurline Abrahams, Jennifer Buckley, P. Westcott, C. Robson, Catherine Elder, Margaret Cochrane, William Hill, Peter Rennie, J. J. Truscott, L. Campbell, W. M. Barrett, M. C. Giles, A. J. DeFina, Samuel B. Morris, G. Neave, R. J. Curnow, E. T. Jakeman, A. Sinclair, J. Yeates, H. Wallace, Ken Wilson, Peter Heslop, A. R. Moore, C. L. McCready, J. H. Murray, R. O. Ryan, M. N. Morris, Neville Lewis.

Introducing the lecturer to the meeting the President said he had a pleasant announcement to make. Dr. Wright had attained his Doctorate in Philosophy in Pharmaceutical Science. (Applause.) On behalf of the Newcastle and Hunter Valley Pharmacists' Association he conveyed sincere congratulations to Dr. Wright.

Mr. Lewis then called on Dr. Wright to address the meeting.

Dr. Wright said he would discuss the 1955 A.P.F.

The advent of a new edition was always important. The new edition came into force on October 1. It was a revolutionary edition in many ways. Doctors should be told of the change in formulae.

The first edition of the A.P.F. was brought out in 1902; in 1929 Mr. Finnemore took over its editorship. He set the pace for subsequent editions.

Dr. Wright said there was a lot to discuss in the new A.P.F.

Dr. Wright then spoke for nearly two hours and the large number present were tremendously impressed with the vast amount of work which had been put into the editing of the new volume.

Many questions were put to Dr. Wright from all sections of the audience.

At the conclusion of the meeting, Mr. Lewis said: "I am amazed at what I don't know about the A.P.F., but we gained tons of knowledge tonight. Everyone will go home and commence to peruse the A.P.F."

Conveying thanks to Dr. Wright, Mr. Sam Morris said it had been a most instructive evening. The men who compiled the new edition were to be highly congratulated on their good work.

Christmas Party

Mr. Mark Morris said the second Christmas party would be held on December 7 in Winn's Shortland Hall. Only 150 tickets were available.

The meeting then terminated.

SYDNEY UNIVERSITY TRAVEL FUND

Pharmacology Department Luncheon to Donors

Pharmaceutical firms have now contributed £1,600 for 1955-56 to launch an annual travel fund for the Department of Pharmacology, Sydney University. The fund was inaugurated last June by the Professor of Pharmacology, Professor R. H. Thorp.

Representatives of firms which had contributed to the fund were entertained to lunch at Sydney University Union on November 18. The guests were—Mr. S. P. Ahearn, of British Drug Houses (Aust. Pty.) Ltd.; Mr. H. Berry and Dr. C. Wallace Ross, of Drug Houses of Australia Ltd.; Mr. A. H. Francis, of Nicholas Pty. Ltd.; Mr. E. H. Kidger, of Menley & James (Aust.) Ltd.; Mr. C. L. McDonald and Mr. N. W. Humphreys, of Charles McDonald Pty. Ltd.; Mr. T. A. Martin, of May and Baker (Aust.) Pty. Ltd.; Mr. F. M. Needham, of Boots Pure Drug Co. (Aust.) Pty. Ltd.; Mr. G. Percival, of Allen & Hanburys (A'asia) Ltd.; Mr. G. V. Scammell, of F. H. Faulding & Co. Ltd.; Mr. S. A. Simpson and Mr. J. Trahar, of Roche Products Pty. Ltd.; Mr. J. F. Torpy, of H. H. Buckley & Co. Pty. Ltd.; Mr. T. J. White, of Parke, Davis & Co. Ltd., and Mr. P. A. Smith, of Burroughs Wellcome & Co. (Aust.) Ltd.

Professor Thorp presided and other members of Sydney University Staff present were—Prof. S. H. Roberts, the Vice-Chancellor; Miss M. A. Telfer, Registrar; Prof. P. O. Bishop, Prof. C. W. Emmens, Mr. A. Gamble, Miss E. Nicholls, Mr. S. E. Wright, Dr. E. A. Johnson and Miss J. Swales.

Apologies were received from—Miss R. Wilson, of Beckers Pty. Ltd.; Mr. H. H. Buckley, of H. H. Buckley & Co. Pty. Ltd.; Dr. A. Ungar, of Andrew's Laboratories Pty. Ltd.; Mr. R. Paul, of Sandoz Ltd.; Mr. W. F. Scammell, of F. H. Faulding & Co. Ltd.; Mr. L. T. Edwards, of Abbotts Laboratories Pty. Ltd., and Mr. R. J. Sutherland, of Wyeth International Ltd.

After the luncheon Professor Thorp welcomed the guests and thanked them for their generous response to the fund. He reported that three distinguished British scientists had been approached and had already indicated their willingness to visit Sydney.

The first was Dr. J. W. Trevan, M.B., B.S., B.Sc., F.R.C.P., F.R.S., a member of the Board of Studies of Pharmacology, London University, and former Director of the Wellcome Physiological Research Laboratories. Professor Thorp said Dr. Trevan had written numerous scientific papers on pharmacology and physiology, particularly relating to the quantitative assessment of drugs and biological standardisation.

The second, Professor F. R. Winton, M.A., M.D. (Cantab.), D.Sc. (Lond.), is Professor of Pharmacology at the University of London. He was former editor of the "Journal of Physiology" and committee member of the Physiological Society. He had published the student textbook, "Human Physiology," which had passed through several editions and was still in use and he was also the author of numerous publications on the physiology and pharmacology of the kidney.

The third scientist was Professor J. H. Gaddum, F.R.S., F.R.S.E., ScD., M.R.C.S., L.R.C.P., Professor of Materia Medica, Edinburgh University, formerly Professor of Pharmacology at the Egyptian University, Cairo, London University, and the College of the Pharmaceutical Society, London. He has published numerous papers on many aspects of pharmacology, particularly on histamine and neuro-humoral transmission and was the author of the textbook, "Pharmacology," widely used by medical students.

Professor Thorp then read letters from the three scientists. Professor Winton's letter stated that he would be able to free himself from his duties from March 25 till about the middle of June, 1956, and he "would be enthusiastically glad" if he were invited to visit Sydney University. He wrote: "Australia—as described by Australians who work here and by English who have been

FOR TENDER SKIN



SELL AM-O-LIN

FOR BABIES:

BUTTOCK RASH
WIND CHAFE
SALIVA SORES

BLEMISHES
IRRITATIONS

USES FOR CHILDREN:

ABRASIONS
BURNS
ENCRUSTATIONS

FACIAL SORES
SUPPURATIONS

GENERAL USES:

DRY SKIN
COLD SORES
CRACKED HANDS

NERVE RASH
CHAPPED LIPS
SUNBURN

**AM-O-LIN offers a wide
prescribing range**

PROPERTIES:

EMOLLIENT

ASTRINGENT

ANTISEPTIC

ANTIPRURITIC

KERATOPLASTIC

P.A.T.A. and Chemists only

Sold in 2 Sizes — 2/- and 4/-

AVERY

SCALES FOR

- Lasting Accuracy ● Attractive Appearance
- High Sensitivity ● Customer Goodwill



The modern Avery 2028 enclosed dispensing beam scale of 2-oz. capacity has a sensitivity of 0.3 grains. Finished in gleaming white porcelain.

The Avery 3302 ABN person weigher is ideal for the chemist who provides a personal touch in weighing and also for dietary control. Graduated 20 stone x 1 oz. Beautifully finished in white porcelain.

The Avery 2105 baby scale is designed to weigh accurately to those vital ounces. Of 40-lb. capacity by 1/4-oz. divisions, this scale is fitted with a strong basketwork cradle 22" x 13" x 6" deep to hold baby safely.



There is an Avery Scale for every weighing need

W. & T. AVERY (Aust.) PTY. LTD.

SYDNEY, MELBOURNE, BRISBANE, ADELAIDE, PERTH, HOBART

Branches and Service Depots throughout all States of Commonwealth

NEW SOUTH WALES—Continued

out—has always seemed to me one of the most exciting and interesting corners of the world."

Dr. Trevan's letter intimated that he would be free to come any time next year and he made several suggestions as to subjects for lectures.

Professor Gaddum's letter said he was "much attracted by the idea" that he might be one of the visiting professors. As there was a meeting of the British Pharmacological Society in Edinburgh in the summer of 1956, he would be unable to come until 1957 or 1958.

Professor Thorp suggested that Professor Winton be invited for 1956 and Professor Gaddum for 1957, later invitations to be left for further consideration. He then informed the visitors that Mr. S. E. Wright, Senior Lecturer in Pharmacy, had applied for a Fulbright grant to visit the United States next year and he felt sure they would be happy to know that some assistance from the travel fund would be given to him if necessary.

The Vice-Chancellor, Professor S. H. Roberts, said he wished to commend to the visitors the efforts of Professor Thorp, who, unlike some professors, got along so well with the "downtown" representatives of his profession. He thanked all those present not only for their donations, but also for the goodwill they had shown towards the University.

PHARMACEUTICAL SOCIETY OF NEW SOUTH WALES

Alterations to Articles of Association

At a Special General Meeting of members of the Pharmaceutical Society of N.S.W., held in the Stawell Hall on November 29, 1955, the following alterations were made to the Society's Articles of Association.

Article 9 was amended to enlarge eligibility for Associate Membership.

Article 11, Fellowships, now reads—

"The Council may at their discretion confer fellowship of the Society upon such scientific men as have distinguished themselves in any of the branches of knowledge embraced in the educational objects of the Society and such men as in the opinion of the Council shall have aided and advanced any of the objects of the Society.

"Fellows may after election be exempted from payment of further subscriptions at the discretion of the Council and may have the same privileges and be subject to the same provisions as Life Members."

Article 13, Subscription, has been altered. The Annual Subscription for 1956, and in subsequent years, will be £3/3/-.

Article 29 now provides for retirement of the whole Council every two years, instead of retirement of half the Council each year. Elections will thus be held at intervals of two years.

The Diploma fee is now £1/1/-.

The Special Resolution set out hereunder was duly passed at a general meeting of the Pharmaceutical Society of New South Wales, held at the Stawell Hall, 145 Macquarie street, Sydney, on the twenty-ninth day of November, 1955.

That the Articles of Association of the Pharmaceutical Society of New South Wales be altered as follows—

Article No. 1.—Delete the words and figures "Companies Act 1899, Section 247" and substitute therefor the words and figures "Companies Act 1936, Section 97."

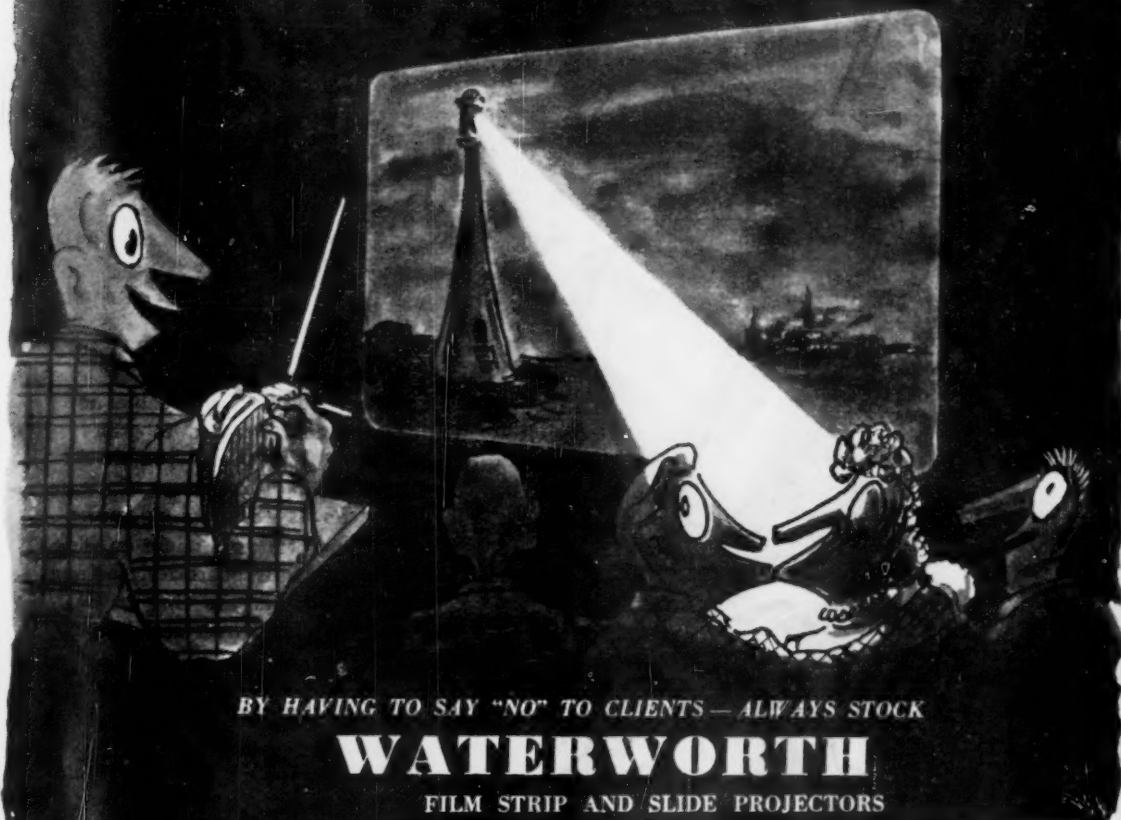
Article No. 2.—Delete the figures "2,000" and substitute therefor the figures "4,000."

Article No. 5.—In paragraphs (a), (b) and (c) delete the words "twenty pounds" where they severally occur and substitute therefor the words "fifty pounds."

Article No. 9.—Delete the whole of the first paragraph of Article 9 and substitute therefor the following new paragraph—

"An apprentice to a registered pharmacist carrying

NEVER BE EMBARRASSED



BY HAVING TO SAY "NO" TO CLIENTS — ALWAYS STOCK

WATERWORTH

FILM STRIP AND SLIDE PROJECTORS



MADE ENTIRELY
IN AUSTRALIA

"AUSTRALIA'S OWN PROJECTOR"
IS AVAILABLE IN VARIOUS MODELS

They are very efficient, easy to operate and can be supplied with lenses having from 3-10 in. focal lengths. A Micro-Attachment can also be supplied.

SPARES ALWAYS AVAILABLE

E. N. WATERWORTH

G.P.O. Box 113D, HOBART

Dear Sirs,—Please send me details and price list.

Name

Address



It's a cold fact

Eskimos live on a pretty monotonous diet, but babies in this country are used to great variety. That's why you should carry the complete range of Heinz Baby Foods—Strained or Junior. Most mothers go straight to Heinz shelves at their pharmacy, looking for all the varieties they have grown familiar with and learned to trust. Almost any food a doctor may recommend can be found in the Heinz Baby Food range.

It's a fact that variety is the spice of life, so pep up the baby food business in your pharmacy—always have a complete Heinz Baby Food Department.

Australia's most complete line of

**BABY
FOODS**

57

is

HEINZ

on business in the State of New South Wales, or a student studying towards completion of the Pharmacy Course at the Sydney University, or a person having completed and passed the prescribed course at the Sydney University, but not having completed requirements as prescribed, to become a qualified pharmacist, shall be eligible for admission as an Associate Member and if desirous of being admitted shall make an application in writing to the Secretary in the form hereinafter contained and shall furnish such evidence as to his qualifications as the Council shall require; such person to be elected in the manner provided by Article No. 6."

Add to the form prescribed in Article 9 the words "In the event of my being elected as an Associate Member, I undertake and agree to apply for advancement to full membership immediately I become so eligible."

Article No. 11.—Delete the whole of Article 11 and substitute therefor the following new Article 11—

"The Council may at their discretion confer Fellowship of the Society upon such scientific men as have distinguished themselves in any of the branches of knowledge embraced in the educational objects of the Society and such men as in the opinion of the Council shall have aided and advanced any of the objects of the Society.

"Fellows may after election be exempted from payment of further subscriptions at the discretion of the Council and may have the same privileges and be subject to the same provisions as Life Members."

Article No. 12.—Insert the word "Life" between "Honorary" and "Members," in the third line of paragraph 1.

Delete the whole of Paragraph 2.

Add "Honorary Members shall have the right of voting at any General Meeting of the Society."

Article No. 13.—Delete the symbols and figures "£2/2/-" and substitute therefor the symbols and figures "£3/3/-."

Article No. 18.—Delete the figures and symbols "10/-" and substitute therefor the following symbols and figures, "£2/2/-."

Article No. 20.—Add to Article 20 the following new paragraph—

"Any person who has withdrawn from the Society in accordance with this Article may apply to rejoin the Society upon payment of the whole or part of the subscription, at the Council's discretion, for the years since he last paid his subscription, together with the current subscription."

Article No. 23.—Delete the symbols and figures "£2/2/-" and substitute therefor the symbols and figures "£10/10/-."

Article No. 29.—Add to Article 29—"Provided that nothing in the foregoing paragraph shall apply after the Annual General Meeting held in March, 1956."

"The Members of the Council elected at the Annual General Meeting in March, 1956, shall hold office for one year calculated from the date of their election. At the Annual General Meeting held in March, 1957, all Members of the Council in office shall retire, but shall be eligible for re-election. Thereafter the Members of the Council shall hold office for two years calculated from the date of their election."

Article No. 30.—Insert after the word "year" the words "in which an election of Members of the Council is held."

Article No. 31.—Insert after the word "year" the words "in which an election of Members of the Council is held."

Article No. 42.—Delete the word "ten" and substitute therefor the words "twenty-five."

Article No. 43.—Delete the figures "30" and substitute therefor the figures "25."

Article No. 45.—Add to Article 45 the following new paragraph—

"The accidental omission to give notice of a meeting to, or the non-receipt of a notice of a meeting by, any

Have your P.B.A.

and

P.M.S. account

done by

DAVID BURFITT

9 Smith Street, Regents Park,
N.S.W.

Phone UM 7587

Quick Service

£1 per 100 Scripts

TARTRATES and CITRATES

B.P. Quality Australian Made

CREAM OF TARTAR

TARTARIC ACID

SODIUM POTASSIUM

TARTRATE (Rochelle

Salts)

CITRIC ACID (hydrated
and anhydrous)

SODIUM CITRATE

SODIUM ACID
CITRATE

POTASSIUM CITRATE

HIRISE SPECIAL

AERATOR for Self
Raising Flour, Baking
Powder and Cake
Mixes

FOOD PHOSPHATES

MONO-CALCIUM

PHOSPHATE (acid

Calcium Phosphate)

PHOSPHORIC ACID

(Technical Grade)

Enquiries invited for

supply of other
Tartrates and Citrates

WHOLESALE HAVES SUPPLIES

Manufactured by:

AUSTRALIAN CREAM TARTAR

CO. PTY. LTD.

PARRAMATTA, N.S.W.

Interstate Agents: GOLLIN AND CO. LTD.

Adelaide • Brisbane • Melbourne • Perth • New Zealand

It Pays to Display



HEXAVITA

HEXAVITA is a scientifically designed solution of Vitamins A, B complex, C, D2 PLUS B12. It may be readily mixed with aqueous liquids in all proportions, and it does not separate from these solutions.

In the Merchandiser Pack
28 cc. (1 fl. oz.):
Wholesale 60/- doz., Retail 8/-

and
THE FAMILY PACK

4 oz.: Wholesale 216/- doz., Retail 28/-
Your Local Medicos are being detailed.

A product of
**ASSOCIATED DRUG COMPANIES
OF AUSTRALIA PTY. LTD.**

Distributors
The Wholesale Drug Co. Ltd., Sydney.
Sigma Co. Ltd., Melbourne.
Queensland Druggists Ltd., Brisbane.
Rumbles Ltd., Perth.
Southern Drug Co. Ltd., Adelaide.

NEW SOUTH WALES—Continued

member shall not invalidate the proceeding at any meeting."

Article No. 46.—Delete the word "eight" and substitute the word "twenty."

Article No. 68.—Add to Article 68—

"The accidental omission to give notice of a meeting to, or the non-receipt of notice of a meeting by, any member shall not invalidate the proceedings at any meeting."

Article No. 71.—Delete the figures and symbol "10/6" and substitute therefor the symbols and figures "£1/1/-."

Article No. 83.—Delete the whole of Article 83.

PHARMACY BOARD

Monthly Meeting

The Pharmacy Board of New South Wales met at 52 Bridge street, Sydney, on November 8, at 8 p.m.

Present.—Mr. J. L. Townley (President) and Messrs. L. W. Smith, K. A. Cartwright, G. Simpson, A. West, E. Dempster.

Inspector's Reports.—Two prosecutions were authorised.

First Year Equipment.—The Board noted with satisfaction a report on Inspections carried out by the Inspector.

Applications for Registration were approved as follows:—

Having Passed Qualifying Examination: Mary Dell Thomas and Graham Palmer Kent.

By Reciprocal Agreement: Ronald D. Roy and William John Snowsill (both from New Zealand).

Name Restored to Register.—Keith Wyllie Porter.

Certificates of Identity were issued to Julie M. Mintorn (to New Zealand), Colin D. Griffiths (to Great Britain) and Isobel Nicholson (to Great Britain).

Poisons Act.—The following deaths from poison had been received since last meeting, viz.: Arsenic 1, Barbiturates 4, Strychnine 1, Morphine 1, Morphine and Barbiturate Co. 1, Pot. Bromide and Chloral Hydrate 1.

Acceptance of Leaving Certificates.—4.

Registration of Indentures.—Registrations comprised 4 new indentures, 4 transfers and 2 cancellations.

Death of Board Member.—Mr. C. O. V. Leggo.—It was decided to place on record the Board's appreciation of Mr. Leggo's services while a member and to forward a copy of the minute to Mrs. Leggo, under the Board's Seal.

The meeting closed at 9.15 p.m.

THE GUILD

S.B.C. Meeting

The State Branch Committee of the New South Wales Branch of the Guild met at Science House, 157 Gloucester street, Sydney, on November 10, at 8 p.m.

Present.—Messrs. W. F. Pinerua, K. W. Jordan, R. S. Leece, P. R. Lipman, J. N. Young, R. W. Feller, W. G. Sapsford, R. L. Frew and K. E. Thomas.

Apologies were received and accepted on behalf of Messrs. L. W. Smith and C. D. Bradford.

Chairman.—Mr. W. F. Pinerua took the chair in the absence of the State President, Mr. Smith.

Illness of Mr. Smith.—Mr. Pinerua said that unfortunately Mr. Smith had been admitted to Gloucester House. All members present recorded their sincere regret at the news of Mr. Smith's illness, and it was decided



As the magnet attracts steel...

KALOPECTIN

adsorbs and removes
bacteria, toxins and other irritants
in simple and complex
DIARRHOEAS

*Kalopectin coats and protects irritated intestinal
mucosa and consolidates the stool to normal
consistency.*

KALOPECTIN NO. 1	KALOPECTIN NO. 2
Contains in each fl. oz.	Contains in each fl. oz.
COLLOIDAL KAOLIN 6 gm.	COLLOIDAL KAOLIN 3 gm.
APPLE PECTIN 0.3 gm.	PHTHALYL-SULPHACETAMIDE 4 gm.
	APPLE PECTIN 0.3 gm.
Issued in bottles of 4, 8 and 40 fl. ozs. Obtainable from all pharmacies.	

PALATABLE AND STABLE
SUSPENSIONS.

May be used alone or as
prescription vehicles.

Physicians' samples and literature
available on request.

AN AUSTRALIAN-MADE ETHICAL BY

Charles M'Donald PTY. LTD.
MAKERS OF PHARMACEUTICAL SPECIALTIES

610 Elizabeth St., Redfern, Sydney. Cables and Telegrams, 'CHARLMAC' Sydney.
Telephones MX 1263, MX 3884

The advertisement is enclosed in a large, ornate oval frame. At the top center is a decorative label with the '4711' logo surrounded by pine branches. Below this, the text 'From Cologne for Christmas' is written in a cursive font. Surrounding the text are several 4711 products: a large bottle of 'EAU DE COLOGNE' with the '4711' logo, a smaller bottle of 'KOLNISCHE ICE', a box of '4711' soap, a candle in a decorative holder, and several other ornate perfume bottles. The background is a textured, stippled pattern.

**From Cologne
for Christmas**

Distributors: Robert Blau (Australia), 387 Kent St., Sydney;
422 Collins St., Melbourne; 119 Charlotte St., Brisbane.

"4711" COLOGNE, GERMANY
A 50130

to write to Mr. Smith expressing sympathy and the wish that he would soon return to the table.

Death of Orion Leggo.—Mr. Pinerua asked the committeemen to stand in memory of their dear colleague, Orion Leggo.

Perpetuation of the Memory of Orion Leggo.—Mr. Pinerua said he did not want a decision tonight, but asked the committeemen to reflect on the suggestion made by Mr. Conolly, that a bronze plaque should be cast to be hung in the Guild Board Room.

Mr. Pinerua said he suggested, in addition, that the Guild should endow a scholarship.

Matter to be brought up again at next meeting.

It was decided to write to Mrs. Leggo, expressing the deep sorrow of the committee at Mr. Leggo's passing.

Committeeman in the room of the late Orion Leggo.—Deferred until Mr. Smith should be present at the table.

New South Wales Committee of Inquiry.—Nomination of a panel of three pharmacists—It was resolved to submit the names of three pharmacists to Federal Office, for selection of a pharmacist to sit on the N.S.W. Committee of Inquiry in the room of the late Orion Leggo.

Zono Meetings—

Griffith, October 30.—Report as circulated. The Secretary reported verbally on the meeting.

Parkes, November 27.—Mr. Pinerua said he would attend this meeting if Mr. Smith was not available.

Jacaranda Festival at Grafton.—Mr. Jordan said that Mr. Harper and Mr. Ada, of Grafton, had won prizes with their windows during the festival.

It was decided to congratulate both.

Federal Delegate's Report.—Mr. Scott's confidential letter had been received.

Concerning the recent Federal Council Meeting, it was decided to place on record the thanks of the Committee to the two Delegates, Messrs. Smith and Feller, for their active and successful representation at the Federal Council Meeting.

Society's Christmas Dinner.—December 5. Subscription 35/-. Mr. Pinerua said this was a matter for the individual.

Reports of Sub-Committees were dealt with as follows—

(A.) **Trade and Commerce, Planning and Publicity.**—Meeting held November 8. Mr. Feller said that the report had been circulated. [A summary of the sub-committee report is published at the end of this report.—Ed.]

Merchandising Calendar.—This had now been completed as regards the format and layout.

It was decided to print a special message in the Guild Service Bulletin relating to the "chemist-only" policy, to be sent out with the calendar.

(B.) **Pricing.**—Meeting held November 4. Mr. Thomas said a brief report had been circulated. [A summary of the sub-committee report is published at the end of this report.—Ed.]

Mr. Thomas said that the **Dispensing Drug Tariff** had now gone to the printer. The P.P. List would be sent to the printers in a week or so, perhaps.

An upsetting feature was an increase in the price for printing. Costings would be needed to ascertain whether the price for the pricing service would have to be increased.

Regarding lines to be placed in the Retail List, Mr. Thomas said the policy set out in the Sub-Committee's report was the framework of a policy.

The secretary suggested that "flash in the pan" lines should appear promptly in the Guild Service Bulletin without being carried forward into the Retail List.

Mr. Jordan said he supported the recommendations of the Sub-Committee with the added suggestion by the secretary.

The Sub-Committee's report was received and the recommendations contained therein adopted.

It was decided to add "Playmate" toys to the Guild Service Bulletin alterations.

A FEW
VACANCIES STILL
AVAILABLE

MEDICAL REPRESENTATIVE

Applications are invited from qualified or near qualified men, 25-35 years, married, for the position of Medical Representative for Sydney and Melbourne. Applicants should have a working knowledge of Pharmacology, Therapeutics and Anatomy.

CHECK THESE POINTS

1. Beautifully presented promotional material and lines of unexcelled quality to work with.
2. You will be in the employ of one of the best respected, and most progressive world-wide pharmaceutical and biological manufacturing organisations.
3. Excellent salary on commencement, with frequent review resulting in regular increases commensurate with ability.
4. The man who proves his ability to bring results in this interesting field, can enter HIGH income brackets immediately.
5. Assistance in the purchase of a motor vehicle could be given.

DO NOT PASS THIS OPPORTUNITY

It is a genuine offer of a really interesting position, with your financial security the final result.

Your Application in writing should be addressed to:

The Sales Manager,
G.P.O. Box 3414, Sydney

Applicants are requested to submit full particulars and details of qualifications and experience. We would prefer applicants with no sales experience.

Replies will be acknowledged Feb. 1, 1956.

PROSANA WORM ELIXIR

(Piperazine Citrate)

now available
in 4-oz. bottles
from all whole-
salers, or from
the Manufactu-
rers.



PROSANA
LABORATORIES

145 Beattie Street, Balmain, N.S.W.

Phone WB 2508.

FOLLOW THE LEADER



Sales are stimulated
by constant powerful
advertising in magazines
and newspapers
AND Bob Dyer's
most "listened-to"
shows on the air

**STOCK AND DISPLAY
TOOTHPASTES IN LINE WITH
THIS HUGE PUBLIC DEMAND
AND TAKE THE LEAD IN
YOUR OWN BUSINESS**

Remember! 6 out of 10 people use the COLGATE DENTAL CREAM and COLGATE TOOTHPASTE

NEW SOUTH WALES—Continued

(C.) Dispensing—Meeting held October 26. Mr. Sapsford said a report of the meeting had been circulated.

Wholesale Drug List.—Mr. Thomas suggested this should be discussed with the manufacturers at, say, another Guild Dinner.

Kodak Supplies.—Mr. Feller said no cameras would be available in any appreciable quantity.

Correspondence.—Science House Management Committee, advising that the lift will be closed down for approximately ten working days between December 3 and 18. It was decided to hold the next State Branch Committee meeting on December 1 in view of the cessation of the lift service.

Pharmaceutical Association of Australia, report of first meeting of Conference Committee. Subscription of £5 per person fixed for Conference Delegates. Possibly separate subscriptions for individual functions. Noted.

Mr. A. Rabin, Parramatta, reporting on the November issue of "Family Circle."

New Members Elected.—Messrs. Gordon Carl Fetterplace, Douglas Allan Lawrence, Clifford Leslie McCready, James Francis Malone, Colin Albert Plummer, John Charles Utting, Mrs. P. L. Womersley, and Mrs. W. K. Clinch.

Reinstatements.—Alexander Paterson Lundie and William Leslie Palmer.

Poisons Advisory Committee.—Regarding the matter of a signed order to be lodged with the Drug House before a poison would be despatched, Mr. Pinerua said that it had been agreed that an amendment of the Poisons Act was necessary to remove this obstruction.

Signatures on Cheques.—Mr. Pinerua said that, with Mr. Smith laid up, his signature could not be secured for cheques. It was resolved that Mr. K. E. Thomas sign cheques in lieu of Mr. L. W. Smith, and that the bank be so advised.

The meeting terminated at 11 p.m.

N.S.W. TRADE AND COMMERCE SUB-COMMITTEE

Report of Meeting held November 8, 1955

Present.—Messrs. R. W. Feller, R. S. Leece, K. Jordan, W. F. Pinerua, J. N. Young and A. E. Conolly (Secretary).

Election of Chairman.—Mr. Feller said he would like to express his personal appreciation for the help received from members of the Sub-Committee, also the Secretary during the past term. The State had had a very successful trade and commerce year, in fact, the Federal Council had adopted a number of the Sub-Committee's ideas. He had enjoyed the experience as Chairman of the Sub-Committee. He had stated a year ago that he did not want to hold this position—Chairman of the Sub-Committee—the work should be farmed out to more of the members.

"Thank you for your assistance during the past term," said Mr. Feller.

Mr. Leece nominated Mr. Feller, adding that he had done a particularly good job of work this year, which had been a most successful year. Mr. Leece said he would like to congratulate Mr. Feller on his efforts and would like him to carry on as Chairman of the Sub-Committee.

Mr. Jordan supported the nomination, saying: "I was glad you did not give up the chairmanship last year. Since I returned from abroad I have been speaking to a number of people. They showed great interest in the Trade and Commerce Sub-Committee work and told me of the high esteem in which they held you. This augurs well for the future. The passing around of these important jobs is a good thing up to a point. I congratulate Mr. Feller on the way he handled the Federal Trade and



WHAT MAKES A PHARMACY MODERN?

Primarily, of course, it's the spirit of the man or organisation behind it; and in the forefront of Sydney's most progressive pharmacists is the 72-year-old Hallam Pty. Ltd.

In post-war years a comprehensive plan of store modernisation has been in progress, and although each pharmacy has been an individual problem, due to differences in site, shape and size, there is an instantly recognisable family resemblance. Bray & Holliday are privileged to have been entrusted with this work.

BRAY & HOLLIDAY PTY. LTD.

Planners, Designers, and Makers of Fine Store Fronts, Store Fittings, and Showcases for over 40 Years

BRAHOL HOUSE, 66-74 McLACHLAN AVENUE, RUSHCUTTER BAY - Tel. FA 4121

The illustrations show portions of the pharmacy at 253 Pitt Street. Among its many interesting features are the following:—

Emphasis on speedy sales, with small items below the eye line on patent medicine display shelves; open display counters near the entrance door, with provision for ample forward stock under the displays; fast replacement of stock from reserve immediately behind forward stock display fittings. The mirror treatment of the left-hand wall gives the effect of greater width to the shop, and a pleasing surround for small display niches. Note, too, how the full interior can be seen from the footpath.

Enquiries are invited from chemists in New South Wales.

Transportation costs prevent our carrying out modernization of pharmacies in other states.



Approved Professionally

Masse NIPPLE CREAM



Masse NIPPLE CREAM

Contains 5-Amino acridine 0.0695% and allantoin 2% in a cream base. The base is highly emollient, preventing drying and hardening of the nipples.

In ante and post natal prevention and treatment of cracked nipples.

Masse is invaluable in the last three months of pregnancy for the preparation of breasts for nursing. Daily massage with Masse makes the nipples and areolae soft and pliable and removes the scales that frequently cover the nipples.

Masse is odourless, tasteless and non-toxic, so that breasts need not be washed prior to nursing. It is readily absorbed and does not stain or soil clothing. Nipple shields, wax paper or muslin squares are not required.

Masse provides pleasant prophylaxis against tender, sore nipples, fissures and abrasions when cracked nipples have developed. Masse hastens healing and aids in preventing breast infection.



Pharmaceutical Company

SYDNEY

Commerce Conference. Anything I can possibly do to lighten his burden I will be glad to do."

Mr. Leece said that Mr. Feller displayed just the right balance between tactfulness and forcefulness and this made him an ideal Chairman of the Sub-Committee.

Mr. Feller was declared elected as Chairman for the ensuing year. (Applause.)

Mr. Feller: "Thank you. I believe sincerely what you have said. It has been a real pleasure to work with you. I trust that the coming year will be as successful as the past."

Mr. Feller tabled the report of the Federal Trade and Commerce Conference held in Melbourne in August.

N.S.W. Merchandising Calendar.—Mr. Leece said he had spoken to his brother-in-law, who could not find any trace of a similar calendar. However, he decided the idea was a good one.

Mr. Feller said he believed the concept was good.

Price Cutting.—A chain store at Carringbah was reported to be cutting a number of lines. It was decided to refer the price cutting to the firms whose lines were affected, asking them to take immediate remedial action.

Glucojels.—Mr. Sam Morris suggested a card should be printed (preferably by manufacturers) reading. "For added enjoyment add a bag of luscious Glucojels to every stocking this Christmas."

It was decided to approach Mr. Cain, asking him to comply.

Planning for 1956.—Mr. Feller asked for any specific suggestions for next year's work. Noted for future discussion.

Recommendations from Federal Trade and Commerce Conference.—Mr. Feller said that the five recommendations from the Conference had been adopted by the Federal Council.

Bonus on Kwki Tan.—A member said that the bonus was three on three dozen assorted. He had ordered two dozen oil and one dozen cream. The bonus items received were three tubes of cream, not two of oil and one of cream. It was decided to take this matter up with Nyal's.

"C.O." Policy. Profit Margins on Advertised Lines.—It was decided to discuss this point at the next meeting. The Sub-Committee meeting then closed.

N.S.W. PRICING SUB-COMMITTEE

Report of Meeting held November 4, 1955

Present.—Messrs. K. E. Thomas, R. S. Leece, W. G. Sapsford, C. D. Bradford and William Coad.

Election of Chairman.—Mr. K. E. Thomas was unanimously re-elected as Chairman of the Sub-Committee.

Dispensing Fees.—The Victorian Branch of the Guild sent a schedule of dispensing fees approved by the Victorian State Branch Committee and expressed the view that all States should follow the same pattern for the sake of uniformity.

It was decided that it would not be wise to vary the N.S.W. fees at the present time.

Each member of the Pricing Sub-Committee to be supplied with a copy of the Victorian schedule.

Price Lists.

Prescription Proprietaries List.—Amended quote for production by Simmons Ltd. After discussion it was decided to accept the quotation.

Dispensing Drug Tariff.—Amended quote for production by Simmons Ltd. It was decided to accept the quotation.

Retail Price List.—Mr. Coad reported that the Retail Price List No. 27 had been posted to members.

Mr. Bradford offered to produce the printer's copy for the D.D. Tariff, and his offer was accepted.

It was decided that all members of the Pricing Sub-Committee meet on November 11 to assist in the preparation of the Prescription Proprietaries List.

Retail List: Scope.—It was decided that the Sub-Committee recommend that the policy set out hereunder be

J. G. FRANKLIN & SONS LIMITED

*Makers of Fine Rubber Goods
since 1870*

'Simplic' ENEMAS Breast Relievers

and a wide range of
Surgical Rubberware

Australian Representatives:

PAUL WITZIG & CO. PTY. LTD.
55 YORK STREET, SYDNEY

Pharmacists!

Give yourself time to look after your
business—let us do the

DIFFICULT WORK

- Sterile Solutions • Suppositories
- Milled Ointments • Homogenised Creams
- Microscopic Stains
- Standardised Volumetric Solutions

We will make them in small quantities or in
bulk.

HALLAM LABORATORIES

PTY. LTD.

(Chemists to Sydney since 1883)

213 Liverpool St., Sydney.

Tel. FA 6876.



CHEMISTS' ACCOUNT SERVICE

which has, for the past three years, established a reputation for speedy pricing of PBA and PMS scripts, offer you their service. Post your scripts with signed claim form—

AND WE DO THE REST!

For further inquiries write to—

CHEMISTS' ACCOUNT SERVICE
ROOM 612, 188 CASTLEREAGH STREET, SYDNEY.
Phone MA 5138.

Melbourne Address:
CHEMISTS' ACCOUNT SERVICE PTY. LTD.
129 Elizabeth Street.

PROFUNDOL

(Anglo-Swiss)

Brand of Methylparafynol

(3-methyl-1-pentir-3-ol)

(A liquid consisting only of carbon, hydrogen and oxygen atoms.)

PROFUNDOL is an excellent quick acting sedative and hypnotic without untoward side or after effects, even in very high doses.

It does not produce loss of appetite and is non-habit forming.

Dose: For sedation, 1 capsule.
For induction of sleep, 2 capsules before bed time.

Packings: Vials of 10 and 25:
Price to Patients, 4/6 and 9/6.

Bottles of 100:
Price to Patients, 27/6.

ANGLO-SWISS DRUG CO. PTY. LTD.
92 Pitt Street, SYDNEY. Tel.: BW 1438.

NEW SOUTH WALES—Continued

followed in connection with future issues of the Retail Price List, namely—

1. The scope of the list to be expanded to incorporate additional lines which must be—

- (a) capable of specific description;
- (b) of interest to a reasonable number of Guild Members;
- (c) products of dependable firms and likely to be in regular supply;
- (d) sundry lines where they fit in with the above requirements, e.g., Beauty Lash, Greba Tweezers, and Playmate Toys.

2. The list must not be cluttered up with unimportant lines, rendering it more difficult for reference.

3. Additional expense of production must be justified by the increased usefulness of the list.

4. Due regard must be paid to the difficulty of maintaining correct prices for obscure lines as obsolete prices would discredit the list.

Proposed Wholesale List of Drugs and Chemicals.—Mr. Thomas tabled the Victorian Price List of Drugs and Chemicals. This list showed wholesale prices of drugs, also the retail price where it was deemed necessary. The Guild contributed the retail prices. All wholesalers agreed to sell their drugs at the same price.

The Pricing Sub-Committee expressed the opinion that it would like to see a similar list in New South Wales.

The meeting terminated at 11.5 p.m.

DOCTOR'S APPEAL AGAINST GAOL SENTENCE DISMISSED

Dr. Morris Seifert, of Enmore, lost his appeal against his conviction and sentence of 12 months' gaol on a charge of having conspired to defraud the Commonwealth.

He had been convicted last June, with a chemist, Ronald McKenzie Beesley, on a charge of having submitted false claims under the Pharmaceutical Benefits Act.

The Full Supreme Court, dismissing his appeal on December 15, ordered Dr. Seifert to begin serving his sentence immediately.

Seifert claimed that he had not been given a fair trial, that there was no evidence of conspiracy and that an exhibit of more than 400,000 documents was wrongly admitted at his trial.

MOSQUITO REPELLENTS

Effective mosquito repellents have been synthesised and tested by investigators of the U.S. Department of Agriculture. Most effective is the compound N,N-diethyl-m-toluamide (20218) which prevented bites by yellow-fever mosquitos for 4.5 hours compared with 1.5 hours for a standard military repellent. Against glades mosquitos 29218 gave nearly 2 hours' protection; a standard gave 1.5 hours. Although apparently non-toxic when used on the skin of the arm, further testing is necessary. The new compounds are not available in commercial form.

HOSPITAL PHARMACIES IN U.S.A.

The American Hospital Association, according to a statement in the "Journal of the American Pharmaceutical Association," has announced that of 6447 hospitals reporting, 3498 have a pharmacy department. There are 4157 full-time and 786 part-time pharmacists employed in 2671 hospitals reporting on pharmacy personnel. Seventeen per cent. of the total number of pharmacists employed were located in Federal hospitals.

A touchy subject



But *Sunburned Sue* isn't deliberately defying convention—her painful back and shoulders simply make more clothing intolerable! Such discomfort runs high during the summer months—as does the demand for quick and effective relief. Providing this relief is easy when you employ Butesin Picrate Ointment with Metaphen. This exclusive Abbott preparation not only relieves the pain and discomfort of sunburn, but also helps to protect burned and denuded areas against infection. Combining the analgesic-anaesthetic effect of Butesin Picrate 1% and the bacteriostatic action of

Metaphen 1:5000, this widely used preparation is equally useful in the treatment of minor burns and as a dressing for non-specific ulcers, minor lacerations and abrasions. • Butesin Picrate Ointment with Metaphen is always ready for instant use and may be applied directly to the burned or denuded areas. • Why not have a supply on hand for summer emergencies? Butesin Picrate Ointment with Metaphen is available in convenient $\frac{1}{2}$ -ounce, 1-ounce and 2-ounce tubes and 1-pound jars. ABBOTT LABORATORIES

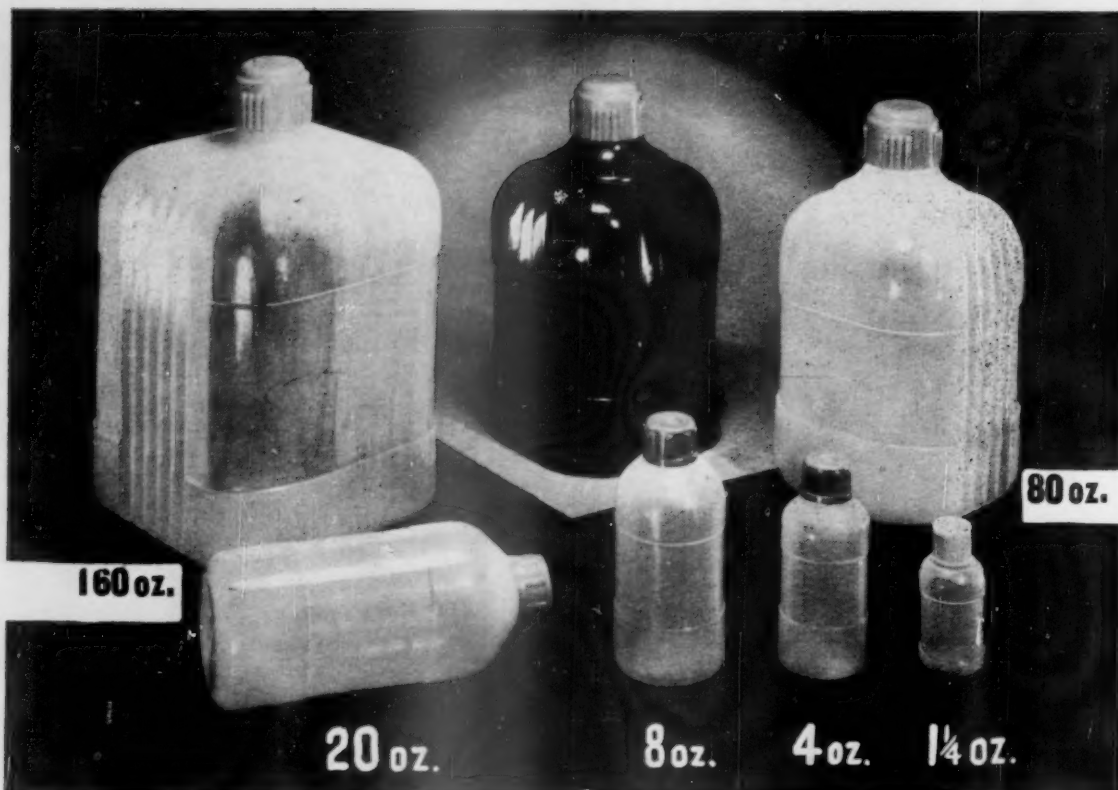
(Australia) Pty. Ltd., cr. Missenden & Parramatta Roads, Camperdown, Sydney, N.S.W.

Our New Telephone Numbers are: LA 5195-LA 5197.

Butesin Picrate Ointment
REG. TRADE MARK
 with Metaphen
REG. TRADE MARK

POLYTHENE ON PARADE

*lift your product with Glensunite Polythene Containers
Plain or Printed -- Multi Colors if Desired*



FLUID CAPACITY OF CONTAINERS RANGES FROM 1 1/4 OZ. TO 160 OZ.

All these and many more FROM STOCK in large or small quantities on prompt delivery. Prices are astonishingly low. We also make to customers' own designs and requirements. Good business demands you stop and examine your packaging. You may be losing money through high transportation costs, breakage, and the need for costly protective packing. Polythene containers eliminate all these and in many instances can be shipped without packing preparation of any sort. Packers of detergents, insecticides,

battery acids, weedicides, etc., are finding the properties of polythene ideal. Manufacturers of cosmetics, pharmaceutical preparations, and so on, are employing squeeze bottles more and more in various shapes and designs to give their products perfect dispensing properties and improved eye appeal. Cordial essences, wines and fruit juices are among many more of the products now being packed in Glensunite Polythene containers.

May we have your inquiries?

L. & I. GLENN PTY. LTD.

463 Auburn Road, Hawthorn East, Victoria

Telephone BY 3382-3-4

AGENTS.—Sydney: E. E. Haselden & Company, 170 Clarence Street. Brisbane: Chas. H. Biscoe & Son, 134 Adelaide Street. Adelaide: R. G. Evans Ltd., 66 Rundle Street. Perth: D. E. Withers, W.A.T.C. Building, Esplanade. Tasmania: "Amsco," 24 Wellington Street, Launceston.

VICTORIA

PERSONAL and GENERAL

State News

Members in Victoria desiring publication of personal items of interest are invited to write or telephone details to the Editor (FJ 5161).

Mr. J. I. Richards has been appointed Returning Officer for the Pharmacy Board and the Pharmaceutical Society of Victoria, in succession to Mr. F. N. Pleasance, who has retired from those offices because of ill-health.

Dr. Douglas Callister, of Kooyong, was amongst those who completed their medical course at the Final examinations held in November, 1955. Dr. Callister completed his training at the Royal Melbourne Hospital. He is the elder son of Mr. and Mrs. A. W. Callister, of Kooyong. Congratulations!

Pharmacy Broken Into.—The pharmacy of Mr. H. B. Winkle, 438 Waverley road, East Malvern, was broken into by thieves on November 30, and cash amounting to about £7 was stolen.

OBITUARY

Cecil Roy Barrett

We regret to announce the death of Mr. C. R. Barrett, which occurred on November 25. Mr. Barrett qualified in Victoria in 1916. He was for some time in practice at Clifton Hill and later undertook relieving work. He is survived by a widow and two sons, to whom we extend our sympathy.

DEATH FROM KEROSENE POISONING

A fatal case of kerosene poisoning occurred at Altona on September 18, 1955, the victim being Anne Marie Sipthorp, a child of nine years of age. The kerosene was taken from a jug in the garage at the child's home.

At the inquest into the death, at the City Mortuary, by Mr. Wade, S.M., on November 8, the Coroner found that the child died from the effects of accidental aspiration of kerosene.

DEATH FROM EXCESSIVE DOSE OF RELAXA TABLETS

A death following the taking of an overdose of "Relaxa" tablets has been recorded. The victim was Mrs. Mary Patricia Furness, 42, of Queenscliff.

Dr. Cecil William Tait told Geelong Coroner's Court on November 9 that an excessive dose of "Relaxa" tablets could cause death. The death of Mrs. Furness was consistent with her having taken an overdose of the tablets.

An open finding was recorded.

The report emphasises the need for observance of the labelling provisions of the Poisons Act and Regulations.

NUMBER OF DOCTORS REGISTERED IN VICTORIA

In reply to a question asked by Mr. Mutton, M.L.A., in the Legislative Assembly, on November 22, Mr. Reid, Hon. Minister, stated that the names of 4552 legally qualified medical practitioners appeared on the Medical

Register of Victoria, and of that number 3428 were resident in Victoria.

The Medical Board of Victoria does not keep records of the nationality of doctors registered, so that it could not indicate how many of those registered were aliens.

Of the total number on the register, 51 obtained their medical degrees at medical schools outside the British Commonwealth.

GUILD STATE PRESIDENT RETURNS

Following their return from their overseas tour, Mr. F. N. Lee were entertained by the Victorian State Branch Committee of the Guild at dinner at Menzies Hotel on the evening of December 13. A large number of friends and associates in the Pharmaceutical Organisations attended.

In the course of the evening, Mr. Lee gave an interesting account of his experiences whilst abroad, many of them having been undertaken in quest of information that would be of value to the Guild in Victoria.

Mr. Lee returned in time to take the Chair at the meeting of the State Branch Committee of the Guild on December 6, when he was welcomed home by his colleagues on the Committee.

AMENDING FRIENDLY SOCIETIES BILL

Mr. Reid introduced an amending Friendly Societies Bill in the Legislative Council on November 24. In moving the second reading, he explained that the Bill was a very short one, without contentious features.

Prior to enactment of the Friendly Societies Amendment Act in 1954, the amount any Friendly Society could pay to a member by way of hospital benefit was £6/6/- per week for a period not exceeding 13 weeks. The 1954 Act removed the limit of £6/6/- per week, but the limit on the period of payment was not altered.

The Benefit Associations Acts also placed a limit on the amount and period for payment of hospital benefits, but an amending Benefits Association Act passed recently removed both limitations. The purpose of the Bill now before the House was to amend the Friendly Societies Act to bring it into conformity with the Benefit Associations Legislation in this respect.

RETIREMENT OF DR. CYRIL J. TONKIN

Twelve persons sat down to dinner at the Hotel Australia on the evening of December 6 in honour of Dr. Cyril J. Tonkin, following his retirement as an examiner to the Pharmacy Board of Victoria.

Mr. H. A. Braithwaite, President of the Pharmacy Board of Victoria, sat at the head of the table in the Cantala Room, and proceedings were completely informal.

After the loyal toast, the only toast offered was that of the guest of honour, who expressed his sincere appreciation of this gesture by his friends of so many years standing.

Apart from the other members of the Board, namely Messrs. S. J. Baird, A. W. Callister, W. R. Iliffe, N. C. Manning, A. W. McGibbony, and W. Wishart, there were



Tinea

pedis, cruris,
capitis, etc.
monilia
infections



Calped Antipruritic Fungicide

in handy Polythene Insufflators
for over-the-counter sales

Particularly suited as a prophylactic against re-infection from footwear and clothing, Calped Powder is the ideal choice where a dry application is deemed suitable. The handy Polythene Insufflator facilitates application to the affected areas, thus allowing Calped to be used inconspicuously on the beach, on the tennis court and for all sporting activities.

This season Calped can be one of your largest-selling counter prescription lines. Stock it and recommend it wherever a safe, antipruritic fungicide is indicated.

POWDER

Parachlorophenylether . . . 1%
Phenylmercuric . . . 0.002%
in a Talc and Amylum Powder
Base. Available in: Polythene
insufflators—approx. 2½ oz.

CREAM

Parachlorophenylether . . . 0.5%
Phenylmercuric Nitrate 0.004%
Acid Salicylic . . . 0.01%
in a Bentonite Cream Base.
Available in 2 oz. jars.

CALPED

CALMIC LIMITED

Crawe and London

Australian Branch: 458-460 Wattle St, Ultimo, SYDNEY. Telephone MA 7644

VICTORIA—Continued

also present Dr. Byron L. Stanton, Mr. Eric Scott, President of the Pharmaceutical Society of Victoria, Mr. F. C. Kent and Mr. T. G. Allen.

Mr. A. T. S. Sissons wrote expressing his keen regret at being unable to attend because of illness.

WIMMERA CHEMISTS LAUNCH "POOL" SCHEME

Wimmera Guild chemists decided at a meeting at Horsham on November 3, to launch a campaign to extend throughout the Wimmera district the "pool" system of supplying medicines to lodge members and their dependants.

Chemists from Horsham, Warracknabeal, Jeparit, Dimboola, Goroke and Kaniva attended the meeting, which was addressed by the Acting State President (Mr. Norman Keith), Mr. W. R. Iliffe (Immediate Past President and a member of the State Executive) and Mr. K. G. Attiwill (Federal Public Relations Director).

Mr. Iliffe explained that the purpose of the meeting was to explain the operations of the "pool" system of dispensing for lodge patients.

It was decided to supply an explanatory article for publication in the local press, and also to circulate chemists in the area, giving full details of the system.

This article, which appeared in the Horsham "Times" of November 15, explained that lodge members throughout Victoria are now able to obtain medicines on a "free for service" basis, providing they subscribe to a Friendly Societies' sponsored medicine rebate pool. The procedure is that lodge subscribers take their prescriptions to any participating chemist they may choose, and pay as private customers. The chemist gives the lodge subscriber a receipt for the amount paid, on a special receipt form, approved by the Association and the Guild, and on presentation of this receipt to the lodge secretary, the member receives a refund. The lodge member can obtain medicine in this way, even if away from his home town.

The Friendly Societies replied in the local papers, saying that the system was none other than the one introduced by the A.N.A. to its members some three years ago, and which has been operating most successfully ever since. Members of the M.U.I.O.F. and A.N.A. were also enjoying the benefits of this scheme. It was a move by chemists to try and influence members of Friendly Societies against the establishment of a dispensary in Horsham. The establishment of the dispensary was recommended to F.S. members.

The Wimmera chemists published a reply refuting the assertion that the system was introduced by the Friendly Societies. It had been instituted, they said, by the Guild itself, to replace the old semi-charitable system under which free medicine was supplied to lodge members by the chemists for a totally inadequate fee. It was common sense that the pool scheme would be less costly than the establishment of a dispensary. The extra levy to cover the cost of a dispensary would far outweigh any discount prices which could not legally be applied to all items purchased by lodge members.

PROPRIETARY MEDICINES ACT

Additions to the Register

In our last issue (p. 1379) we published a list of additions to the Register of Proprietary Medicines which



Recommend Acriflex for treatment of

- Cuts and Abrasions
- Bruises
- Burns
- Chafing
- Sunburn
- Acne
- Insect Bites
- Skin Eruptions

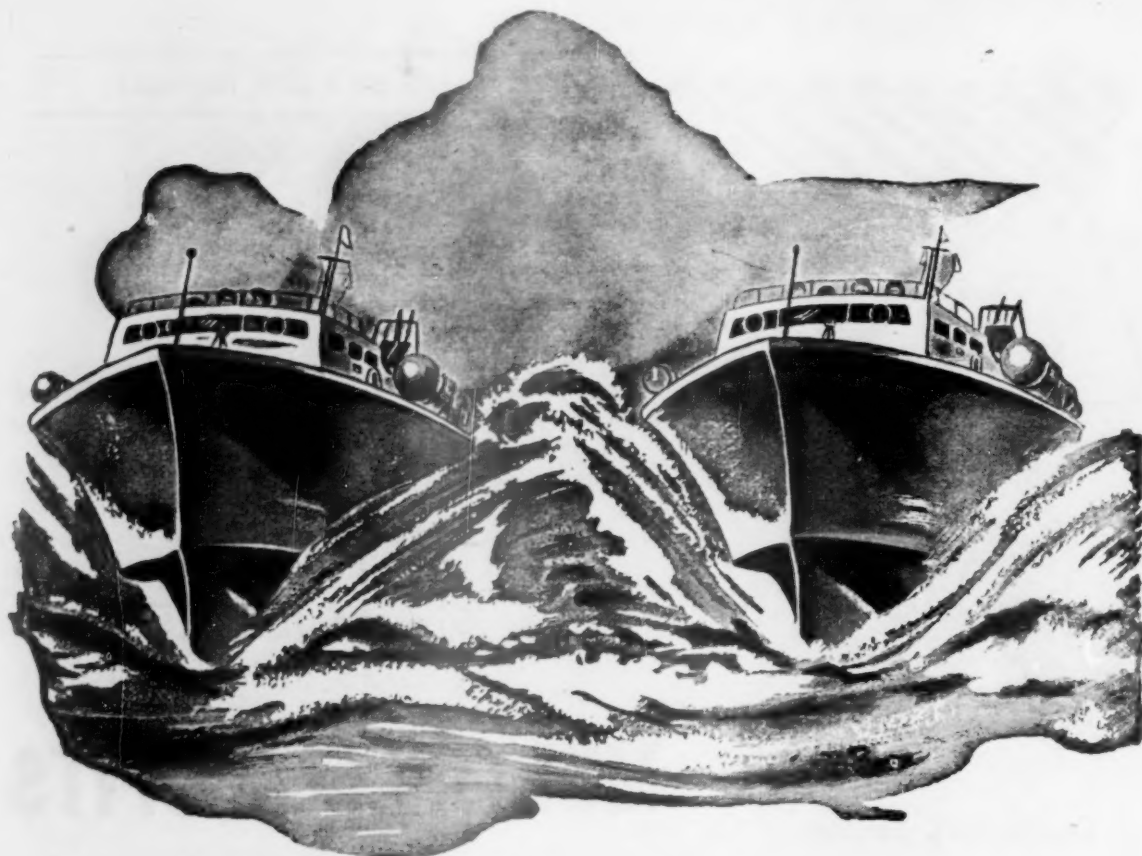
The Healing Cream
with **MULTIPLE USES**
to bring you

MULTIPLE PROFITS

5-aminoacridine, recognised in the 1948 British Pharmacopoeia as aminacrine hydrochloride, is a powerful, non-irritant, non-staining member of the flavine group of antiseptics. Allenburys ACRIFLEX contains aminacrine hydrochloride in a soothing oil-in-water cream, and has proved invaluable during recent years in accident hazards both in industry and in the home.

Repeat sales resulting in multiple profits are a certainty when you introduce your customers to Acriflex. It's such an effective first aid and after treatment for so many injuries that its use is bound to become a habit with men, women and children all year round. Acriflex is a **must** for every home medicine cabinet . . . suggest your customers keep tubes in kitchen and work-shop, too, ready to treat cuts and burns immediately.

ALLEN & HANBURYS (AUSTRALASIA) LTD.
 Reg. Office, N.S.W.: 478, ELIZABETH STREET, SYDNEY Reg. Office, VICT.: 21, SPRING ST., MELBOURNE, C.I.
 Surgical Instrument & General Showrooms: 41, HUNTER ST., SYDNEY - 21, SPRING ST., MELBOURNE, C.I.



A double attack...

against winter ailments of the rheumatic group, etc., has been launched on behalf of **DR. MACKENZIE'S MENTHOIDS and MENTHOID CREME**. High frequency radio announcements over all Radio Stations, regular advertising in Daily and Sunday Press, Women's and National Magazines are all selling the double home treatment—**MENTHOIDS** to treat the cause and **MENTHOID CREME** to give immediate relief from pain. Make sure your stocks are right to meet winter's demand. Remember, every sale of **MENTHOIDS** can mean a sale of **MENTHOID CREME**. Boost YOUR sales by the double attack!

★ Attractive Display Material, Counter Leaflets and Ready-serve Dispenser Racks available on request.

Get your share . . . of the extra profit available on B.M.L. products by buying in £10 (or more) parcel lots.

There's an extra 7½% for you on an assorted parcel of:—
MENTHOIDS, MENTHOID CREME, FORD PILLS, YOUTH-O-FORM, PRESSOR SALT, CURLYPET, KANATOX, NUXIDS, FORD INHALER, Etc.

British Medical Laboratories Pty. Limited

87-91 CLARENCE STREET, SYDNEY

was printed by the Government Gazette on November 9, 1955.

We have been informed that previous lists, gazetted on August 10 and September 21, cannot be obtained from the Government Printer. As many chemists will require these to bring their lists up to date, we publish them hereunder:

Additions, August 10, 1955

Distinctive Name of Proprietary Medicine	Serial Number	Date of Registration
Anthony's Paineze Tablets	4584	3.8.55
Astrem Asthma Inhalant	4525	3.8.55
Ban-O-Pain Tablets	4562	3.8.55
Becaptan	4563	3.8.55
Bromistine with Atropine	4544	3.8.55
Brulidine Powder	4531	3.8.55
Calped	4570	3.8.55
Cellulets	4575	3.8.55
Cellulone	4543	3.8.55
Chilblain Cream	4545	3.8.55
Children's Cough Balsam	4546	3.8.55
Codacetin	4577	3.8.55
Crystoids	4533	3.8.55
Day's Chilblain Tablets	4567	3.8.55
Day's Gargle and Mouthwash . .	4548	3.8.55
Day's Painless Corn Remover . .	4568	3.8.55
Dextrobarb Elixir	4561	3.8.55
Entoral	4549	3.8.55
Ferromyn	4569	3.8.55
F-Tabs	4537	3.8.55
Gee's Linctus Pastilles B.P.C. .	4583	3.8.55
Gross's Tonic for Children . . .	4551	3.8.55
Hives Mixture	4540	3.8.55
Hollow's Bronchitis Mixture . .	4553	3.8.55
H.U.F.S. Antiseptic Poultice Ointment	4556	3.8.55
H.U.F.S. Skin Lotion	4557	3.8.55
H.U.F.S. Wart and Corn Eradicator	4558	3.8.55
Lantigen "B"	4527	3.8.55
Lantigen "D"	4528	3.8.55
Lantigen "E"	4529	3.8.55
Largactil Suppositories	4580	3.8.55
Largactil Syrup	4579	3.8.55
Liver Extract Forte	4578	3.8.55
L-Thyroxine Tablets 0.05 mg. .	4573	3.8.55
L-Thyroxine Tablets 0.1 mg. .	4574	3.8.55
Marlaw Eye Lotion	4572	3.8.55
Melozets	4534	3.8.55
Melto	4554	3.8.55
Morrow's Soothing Syrup	4547	3.8.55
Oliver's Baby Soother	4576	3.8.55
Otalgan	4585	3.8.55
Papaverine Hcl. Gr. $\frac{1}{2}$ Tablets .	4565	3.8.55
Papaverine Hcl. Gr. $\frac{1}{4}$ Tablets .	4564	3.8.55
Penidural All Purpose (Injection)	4581	3.8.55
Penta-Code Tablets	4566	3.8.55
Pernicream	4535	3.8.55
Purgas	4524	3.8.55
Rabro Stomach Tablets	4555	3.8.55
Roberts' Vita-Balm	4550	3.8.55
Rocar	4536	3.8.55
Ryotol	4559	3.8.55
San-O-Lax Worm Syrup	4552	3.8.55
Silbe Asthma Inhalant	4526	3.8.55
Silicone Vasogen	4530	3.8.55
Sima-Varix Bandage	4538	3.8.55
Soothing Syrup	4541	3.8.55
Special Cough Syrup	4542	3.8.55
The Tablets	4571	3.8.55
Topaminic	4532	3.8.55
Veras Vita Capsules Fort	4539	3.8.55
Vi-Globeol	4582	3.8.55
Wallis' Special Antacid Digestive Mixture	4560	3.8.55

DOHO

International Chemical Corporation

NEW YORK, U.S.A.

The important ethical specifics manufactured by the Doho Chemical Corporation of New York are now available in Australia as follows:

AURALGAN. For otitis media and contagious ear disease. Retail 5/6 bottle.

OTOSMOSAN. For suppurative and antibiotic resistant ear infections. Retail 5/6 bottle.

RHINALGAN. Nasal decongestant for hay fever, sinus infections, common colds and allergic rhinitis. Retail 11/8 bottle.

RECTALGAN. For hemorrhoids and anorectal diseases. Retail 15/8 bottle.

Doho products are strictly ethical. Chemists 50% mark up.

MEDICAL DETAILING

The Doho Chemical Corporation is continuing powerful and consistent medical promotion throughout Australia, including:

1. Medical literature mailed fortnightly from New York, to all practising members in Australia of B.M.A.
2. Detailing of all specialists and most general practitioners.
3. Medical and Pharmaceutical press advertising.
4. Medical Films, Slides, and Text Books circulated regularly to all University Medical Schools, Teaching Hospitals, Nurses Training Centres, etc.
5. Distribution to medical profession of free (full size) samples, also supplied at "No charge" on request by wholesalers.

Stocks can be ordered through any wholesale drug house.

Sole Agents: **GREENSON PTY. LTD.**

Greenison House, 110 Little Bourke Street, Melbourne.
T. G. Callum Pty. Ltd., Brisbane. D.H.A. (Western Australia)
Pty. Ltd., Perth. Sharland & Co. Ltd., New Zealand. Belclere (S.A.) Pty. Ltd., Adelaide.



Medicated WINE TONIC

Made from:

High-Grade Malt Extract, Fine Old Wine, etc.

Obtainable throughout Australia:

ALL WHOLESALE DRUGGISTS AND CHEMISTS

Suppliers for—

New South Wales—Wm. Delany & Co., Sydney; Elliotts & Australian Drug Pty. Ltd., Newcastle; Taylor Elliotts Pty. Ltd., Lismore.
Queensland—Taylor Elliotts Pty. Ltd., Brisbane, Rockhampton, Townsville, Cairns.
South Australia—A. M. Bickford & Sons Ltd., Adelaide.
West Australia—Felton Grimwade & Bickfords Ltd., Perth.
Tasmania—Irvine McEachern (1934) Pty. Ltd., Launceston; F. Fairthorne & Sons, Hobart.

Sole Proprietors, Wholesale Only:

ARNOLD BROS.,

527-529 Little Collins Street, Melbourne.

FACTORY MANAGER

A senior appointment is available for a first-class executive to take charge of the Manufacturing Division of **SIGMA CO. LTD.**, Wholesale Druggists.

DUTIES: Complete control of production and administration of the factory employing over 100 people and manufacturing a wide range of ethicals, proprietary and veterinary medicines.

QUALIFICATIONS: Wide experience in modern management methods in some branch of the chemical or similar industry essential. Diploma or degree in pharmacy, chemistry or allied subject desirable.

AGE: 30 to 45 preferred.

SALARY: Not less than £3000 p.a., according to qualifications and experience.

Apply in writing, giving fullest information, which will be treated in strictest confidence, to—

E. G. BRIGHTFORD & CO.,
Personnel Management Consultants,
Hosier Lane, Melbourne, C.1.

Pharmaceutical Defence Limited

have vacated their old offices
at the

COLLEGE OF PHARMACY,
360 Swanston Street, Melbourne,

and are now occupying new offices

on the Fourth Floor,
"Guild House"

24-26 Saint Francis Street, Melbourne,

where Mr. T. G. Allen, the Secretary,
may be interviewed in regard to P.D.L.
Chemists' Indemnity and all business
and personal insurances.

New telephone number FB 3774

VICTORIA—Continued

Additions, September 21, 1955

Distinctive Name of Proprietary Medicine	Serial Number	Date of Registration
Adrenoxyl Ampoules	4612	14.9.55
Adrenoxyl Tablets	4613	14.9.55
Aktedron Tablets	4626	14.9.55
Becantyl	4614	14.9.55
Biocidan "Clin" Ophthalmic Solution	4599	14.9.55
Biocidan "Clin" Tablets	4600	14.9.55
Bradley's Vim Tonic	4633	14.9.55
Chil-A-Tabs	4630	14.9.55
Conly's Kallo Magnesia	4629	14.9.55
Cycoplex	4615	14.9.55
Demalgon Tablets	4627	14.9.55
Diarrhoea Mixture	4595	14.9.55
Dibencil Oral Suspension	4620	14.9.55
Eat-Less	4634	14.9.55
Enterotab Isodrine	4607	14.9.55
Ethiphos sine Strychnine	4608	14.9.55
Flucin	4635	14.9.55
Fludrocortone Topical Ointment 0.25 per cent.	4588	14.9.55
Gelusil	4632	14.9.55
Hay-Drop	4603	14.9.55
Hydrocortone Tablets 20 mg.	4589	14.9.55
Indigestion Powder	4596	14.9.55
Intranarcon Ampoules	4616	14.9.55
Irish Moss Elixir	4590	14.9.55
Lay's Cough Mixture for Chil- dren	4591	14.9.55
Leucotropin Ampoules "Silbe"	4586	14.9.55
Leucotropin Tablets "Silbe"	4587	14.9.55
Mechothane Tablets	4604	14.9.55
Meticorten	4611	14.9.55
Mysoline Oral Suspension	4621	14.9.55
Newland's Stimulene	4594	14.9.55
Nirvana	4601	14.9.55
Panbiline-Methionine	4610	14.9.55
Profundol	4624	14.9.55
Rawleigh's Pleasant Relief	4598	14.9.55
Red Linctus	4625	14.9.55
Reorganin Dragees	4605	14.9.55
Reorganin Suppositories	4606	14.9.55
Reserpin Tablets	4609	14.9.55
Romind	4636	14.9.55
Sulmezil Oral Suspension	4622	14.9.55
Sulmezil Tablets	4623	14.9.55
Surparyl Ampoules	4628	14.9.55
Surparyl Forte Tablets	4617	14.9.55
Sutherland's Chilblain Tablets	4631	14.9.55
Ultraseptyl Ampoules	4618	14.9.55
Ultraseptyl Tablets	4619	14.9.55
Wardoff Cold Mixture	4592	14.9.55
Ward's Bronkof	4593	14.9.55
Ward's Linctus	4602	14.9.55
Wonderine	4597	14.9.55

PHARMACEUTICAL SOCIETY

Council
Meeting

The Council of the Pharmaceutical Society of Victoria met at 360 Swanston Street, Melbourne, on December 7, at 9.30 a.m.

Present.—Mr. E. Scott (President) in the Chair, Mrs. P. A. Crawford, Messrs. S. J. Baird, A. L. Hull, F. W. Johnson, L. Long V. G. Morieson, C. P. A. Taylor, G. H. Williams and the Secretary.

Correspondence.—The correspondence submitted to the Council included the following—

To Miss G. Fleming, Miss H. Macgibbon and Miss A. Tyrer, hospital assistants, thanking them for help with demonstrating.

DIABETICS*

can enjoy these

SUGARLESS PASTILLES

** a delightful confection*

. . . . for those who must diet .

Everybody loves these Sugarless Pastilles. They have such a satisfying fruity flavour. Specially prepared for Diabetics and for cases of obesity—they can now enjoy sweets to their hearts' content.

Sugarless Pastilles are in three wonderful flavours—lime, blackcurrant and peppermint.

Available in handy $\frac{1}{4}$ lb. pocket-size tins.



Sugarless Pastilles

CHEMISTS - ONLY LINE

RING

BM 6129

BM 6120

MA 4004

William Pearce and Co. Pty. Ltd.

WHOLESALE DISTRIBUTORS OF ETHICAL DRUGS

For ACCURATE, PROMPT AND FRIENDLY SERVICE

"Distributors for Luitpold Werke, Munich. Manufacturers of SEMORI, CLAUDEN, HIRUDOID,
COMBIZYN, MONOTREAN, PASPAT."

149 CASTLEREAGH STREET,
SYDNEY

BOSTON SHOPFITTINGS PTY. LTD.

*Extend Christmas Greetings and Best Wishes
for a Prosperous New Year to all Pharmacists
and acknowledge with thanks past patronage.*

64 Sydney Road, BRUNSWICK.

FW 1414

FW 6667

To Mr. F. N. Pleasance, accepting resignation as Returning Officer with regret and conveying thanks for services.

To Mr. J. I. Richards, inviting him to accept position as Returning Officer, and supplying certain information re elections. The President announced that Mr. Richards had accepted the nomination.

To Pharmaceutical Society of Great Britain—letter of introduction in favour of Mr. G. B. Speirs.

From Mr. J. H. McRoberts—thanks for letter of sympathy on death of Sir Russell Grimwade.

To Mrs. M. Barrett—letter of sympathy on death of her husband (C. R. Barrett).

To Mr. C. P. A. Taylor—letter of sympathy in bereavement. Mr. Taylor expressed his thanks to the Council for the message sent to him.

From Mr. H. C. Davis, applying for transfer to Honorary Life Members' list. (Member for more than 40 years.) Mr. Davis was unanimously elected an Honorary Life Member and it was resolved that the good wishes of the Council be conveyed to him.

From Mr. E. Taylor, now resident in New South Wales, tendering resignation. Resignation accepted with regret.

From pharmaceutical chemist attached to wholesale drug house, inquiring if he could enrol for 1956 special series of lectures in Forensic Pharmacy arranged for Fourth Year students. The Council approved the request.

From the Pharmaceutical Society of Pakistan, inquiring if correspondence course conducted by the Victorian College of Pharmacy could be made available to member of Pakistan Society. Matter to be discussed with the Dean.

New Members.—The following new members were balloted for and elected—

Full Member—Miss Mabel Pearl Hayes.

Apprentice Member—Mr. J. L. B. Keane.

Illness of Dean.—The President reported that the Dean of the College, Mr. A. T. S. Sissons, had been confined to bed for two or three weeks on the instruction of his medical advisers.

Council members expressed deep concern at this news and it was resolved that the sympathy of the President and members be extended to Mr. Sissons.

B.P. Dose Book.—Mr. F. W. Johnson, Chairman of the A.P.F. Management Committee, reported that the members of the Committee had completed checking of galley proofs. After discussion the Committee had agreed that it would be desirable to incorporate in the list new substances included in the 1955 Addendum to the B.P. Several days had, therefore, been devoted to preparing appropriate notes. These had been written into the printer's proofs. Mr. Burton had done a particularly good piece of work and the proofs were now ready for submission to the printer. Notes on the uses of the drugs had been referred to Dr. Byron L. Stanton for criticism.

Mr. Johnson also reported on the offer of a wholesale house to underwrite the cost of distribution of copies of the book to medical practitioners, final year medical students and pharmaceutical students in Victoria. Negotiations in regard to this, he said, were still proceeding.

The report was received and adopted.

Council Election 1956.—The Secretary reported that the retiring members of the Council were Mrs. P. A. Crawford, Messrs. F. W. Johnson, C. P. A. Taylor and I. J. Thompson. Mr. Thompson had written intimating that because of ill health he would not be standing for re-election. Mrs. Crawford and Messrs. Johnson and Taylor intimated their willingness to stand.

Mr. J. I. Richards had accepted nomination as Returning Officer and would shortly announce the dates for closing of nominations and holding of the election.

Resignation of Mr. Ivan J. Thompson.—The President read a letter from Mr. I. J. Thompson tendering his resignation as a member of the Council. This was accepted with deep regret. Members referred to Mr. Thompson's work in the Council in appreciative terms and their



CHEMISTS' ACCOUNT SERVICE PTY. LTD.

129 ELIZABETH STREET, MELBOURNE

Phones: MU 8024 (After hours BX 4047)

Specialists in pricing and lodging claims for

P.B.A. & P.M.S. SCRIPTS

Just post your scripts with signed claim form and we do the rest.
INTERSTATE AND COUNTRY CHEMISTS.

We are no further away than your nearest Post Office.

To all Chemists . . .

THARS

**ANTISEPTIC
POULTICE OINTMENT**

is now available from all
WHOLESALE DRUGGISTS

Satisfied users are publicising its healing qualities.
Daily demand is increasing.

Keep Good Stocks—Order NOW!

If you work for it—it will certainly work for you and earn good profits. You can recommend and sell it to every householder—it will never let you down.

SOLE AGENTS:
STUDLEY TRADING CO. PTY. LTD.,
54 William Street, Melbourne.
Correspondence: Box 3028, G.P.O., Melb. Tel.: MB 5355

VITAMIN E IN MEDICINE

STEINBERG C.L. Vitamin E in the treatment of fibrositis. *Am. J. Med. Sci.* 201, 347-9 (1941).

Fibrositis is a disease characterised by inflammatory reaction of fibrous connective tissue anywhere in the body. Primary fibrositis is a metabolic disease, and secondary fibrositis is muscle pain and swelling associated with primary diseases such as arthritis, rheumatic fever, gout, etc. Primary fibrositis is sometimes diagnosed as lumbago, torticollis, muscular rheumatism, myositis, etc.

Vitamin E is of value in the treatment of primary fibrositis, but has little, if any, beneficial effect in cases of secondary fibrositis.

Thirty patients with primary fibrositis were treated with vitamin E either as wheat germ oil or as mixed natural vitamin E concentrate (120 mg. of tocopherol per day). Complete relief was obtained by all patients.

STEINBERG C.L. Dilute and concentrated preparations of the tocopherols (vitamin E) in the treatment of fibrositis. *N.Y. State J. Med.* 42, 773-8 (1942).

Twenty cases of primary fibrositis were treated with pure α -tocopherol, mixed tocopherol concentrates, and wheat germ oil. All of the vitamin E preparations were effective, but the more concentrated forms rather than wheat germ oil were preferred for therapy because no gastric disturbances were induced by them.

STEINBERG C.L. Tocopherols (Vitamin E) in treatment of primary fibrositis. *J. Bone Joint Surg.* 24, 411-23 (1942).

Natural mixed tocopherols, 120 to 240 mg. daily, were given to 20 patients with primary fibrositis. Definite improvement resulted in all cases. Forty other patients were given 300 mg. daily. Most of these patients improved after one week of treatment, and all but five were completely relieved of their fibrositic symptoms. Severe local reactions occurred when tocopherol concentrate was given intramuscularly at weekly intervals for three weeks, but all nine patients were relieved of fibrositic symptoms.

All of 12 patients given 200 mg. of tocopherol in corn oil intramuscularly at weekly intervals and observed for two to four months were also definitely relieved.

The fibrositis of nine out of 12 patients who received 65 mg. of tocopherol by mouth three times daily was definitely improved. Six of ten patients who received 65 mg. of tocopherol by mouth were completely relieved.

Inserted in the interests of Pharmacists by
Pro-Vita Products Pty. Ltd.
422 Collins Street,
Melbourne.

VICTORIA—Continued

sorrow at the circumstances which made his resignation necessary was recorded. It was further resolved that a suitable gift be made to Mr. Thompson to mark the esteem in which he was held by his fellow Councillors during his years of service.

Appointment of Teaching Staff, 1956.—The President said it was usual for the Council at the December meeting each year to appoint the teaching staff for the ensuing year. As there were no suggestions for changes in any of the appointments, members of the teaching staff for 1955 were reappointed for 1956.

P.A.D.E.G.A.—A letter was received from the Pharmaceutical Assistants and Dispensary Employees' Guild of Australia, seeking the Council's support in its objective and inquiring about the Code of Ethics to which members subscribed.

It was resolved that the Executive of P.A.D.E.G.A. be assured of the Council's support.

B.P. Addendum.—A communication was received from the Pharmacy Board seeking comment on a proposal that the 1955 Addendum to the B.P. should operate as from January, 1, 1956. The Council signified its approval of the proposal.

Weights and Measures.—A member of the Council referred to the recent decision that charges for verification of weights and dispensing balances should be doubled. After discussion it was resolved that a protest against the increase should be made in conjunction with the State Branch Committee of the Guild.

College Rebuilding.—The President reported that after many interviews approval had now been given by the Premier and the Treasury that the Society's own architect proceed with preparation of working plans for the new College building in Parkville. It was estimated that four months would be required for completion of the plans and that tenders would then be called. The architect had received instructions from the Executive and confirmation of this action was required. The action of the Executive was confirmed.

College Opening, 1956.—It was resolved that an invitation be extended to Dr. A. L. Cunningham to act as Guest Speaker and present prizes at the official opening of the 1956 session of the College of Pharmacy on February 14, 1956.

Financial.—The Hon. Treasurer submitted the monthly financial statement and accounts totalling £3,375/15/5 were passed for payment.

The meeting closed after Mr. Baird, on behalf of the members of the Council, had conveyed good wishes for the Christmas Season to the President, and Mr. Scott had responded.

B.M.A. OFFICERS

At the annual meeting of the British Medical Association (Victorian Branch) held on December 9, 1955, officers elected were:—

President: Dr. George Swinburne.

Vice-Presidents: Drs. A. B. McCutcheon and Keith H. Hallam.

Secretary: Dr. G. Newman-Morris.

Treasurer: Dr. Leonard H. Ball.

Librarian: Dr. J. Gavin Johnson.

Chairman of Council: Dr. H. C. Colville.

NOBECUTANE

THE STERILE PLASTIC WOUND DRESSING

(Brü. med. J.
1954.2.17)

NOBECUTANE

consists of an acrylic resin dissolved in a mixture of acetic esters. When applied to the dry skin the solvent evaporates leaving an elastic, transparent, and adhesive film.

NOBECUTANE

has many advantages over conventional dressings. It is non-irritating, transparent, tough, pliable and durable and can be applied over joints where some degree of mobility is required.

NOBECUTANE

is impervious to bacteria but permeable to air and water vapour and allows normal aqueous exhalation of the skin to escape. No maceration of the skin occurs.

NOBECUTANE

is economical in use and results in a saving of at least 20% over the cost of conventional dressings. In addition it is welcomed by nursing staff who find it effects a considerable saving in time.

Packed and issued by the sole distributors

NOW ALSO AVAILABLE IN SPRAY CONTAINERS



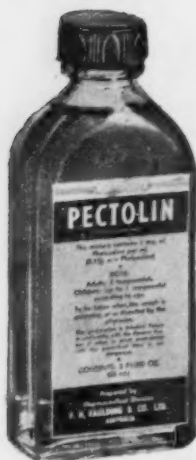
NOBECUTANE

is available in 300 ml. spray containers, holding sufficient solution to dress 60-70 surgical wounds. It is also available in bottles of 50 ml. and 250 ml.

*Manufactured in Sweden by
A. B. BOFORS, NOBELKRUT*

EVANS
MEDICAL

Distributed in Australia by
EVANS MEDICAL AUSTRALIA (PTY.) LTD.
SYDNEY AND MELBOURNE



a new anti-tussive

that's *more* effective with *more* people and
safe for all

PECTOLIN

Based on Pholcodine (morpholinyl—ethyl morphine), Pectolin has demonstrated clinically that it is a cough sedative of positive effect. Its toxicity is low, and Pectolin is particularly well tolerated by infants, children and adults with digestive impairments.

contains no diamorphine, morphine or codeine

May be prescribed with confidence for patient relief in all cases of pertussis, bronchiectasis, pulmonary tuberculosis, bronchogenic carcinoma.

Produced by

F. H. FAULDING & CO. LTD.
AUSTRALIA

Pharmaceutical Division



**For Quicker
Turnover
Sell Bex**

With Bex, stock moves off your shelves fast, repeats are rapid, and give you a rate of turnover that yields maximum profit from a limited investment.

Demand for Bex today is greater than ever because Bex is a quality product that does all that is claimed for it and because its sale is promoted by large and consistent advertising on a year round, national scale in the press and on the radio. The manufacturers of Bex stand solidly behind the retail trade.

Ask for and use the display material available to you.

Bex

Powders & Tablets

QUEENSLAND

PERSONAL and GENERAL

State News

Members desiring publication of personal items of interest are invited to write or telephone details to the Journal Correspondent in Queensland, Miss D. Brighthouse, phone B 8407.

Mr. W. Ritchie is establishing a pharmacy at Orontes road, Yeronga.

Mr. J. P. McGuire, 170 Beaudesert road, Moorvale, is opening a branch pharmacy at 176 Beaudesert road.

Mr. R. G. Colledge has left for Charleville to take over the management of W. H. Green Pty. Ltd.

Mr. R. M. McCawley, Indooroopilly, is commencing a Branch Pharmacy at Kenmore under the management of Mr. J. C. Gilmour.

Congratulations to **Mr. Ken Woods**, formerly of Innisfail, on his appointment as General Manager of Spiers Pharmacies, Brisbane.

Mr. Neville Gaha, formerly of Mt. Morgan, will leave for overseas early in the New Year. He plans to be away for several years, combining business with sight-seeing.

Engagements.—Congratulations and good wishes are extended to two pharmacists who announced their engagement during the month. They are:

Miss Pat Wilson, of Greenslopes, whose fiance is **Mr. Ian Brusasco**, New Farm.

Good wishes are also offered to **Miss Patricia H. Graham**, of Ascot, on the announcement of her engagement to **Mr. John L. Rochester**, of Newcastle.

OBITUARY

The death took place in Brisbane on December 7, of **Mr. David Scott-Hyslop**, at the age of 77.

Until his retirement from business six years ago, the late Mr. Scott-Hyslop had practised as a pharmacist at Sandgate for 38 years.

The late Mr. Scott-Hyslop had also had a long association with the Pharmaceutical Society of Queensland, not only as a member, but as a Councillor and office-bearer. In the days of the Queensland College of Pharmacy and Chemistry, Mr. Scott-Hyslop was also a member of the College Committee.

He has left a widow, two daughters and three sons—all the sons being pharmacists—to whom sincere sympathy is extended.

CHRISTMAS DINNER PARTY

Sixty chemists with their wives and friends accepted the invitation of the Council of the Pharmaceutical Society to participate in the Christmas Dinner Party arranged by the Council. The party was held at the Criterion Hotel on December 6.

The guests were received by the President, **Mr. R. V. S. Martin**, and Mrs. Martin, and the Vice-President, **Mr. L. A. Stevens**, and Mrs. Stevens. Christmas decorations lent a festive air to the occasion, and during the evening Mr. Martin, on behalf of the Council, extended seasonal good wishes to those present.

As this function proved so enjoyable and successful, it is hoped that it will be the forerunner of many others.

R. C. COWLEY INTERMEDIATE AWARD

This award, which is presented by the Pharmaceutical Society for the best Intermediate pass of the year, has for 1955 been awarded to **Mr. Ronald E. Burns**, of East Brisbane.

Mr. Burns passed his scholarship examination while attending the East Brisbane State School. He was successful in the Junior Public Examination whilst a student at the Brisbane State High School. He matriculated while studying at the Evening Tutorial Classes. In the first year Pharmacy Examinations conducted by the Central Technical College Mr. Burns obtained five honours out of five subjects.

Mr. Burns has also completed two years of the Diploma Course of Industrial Chemistry. He is serving his apprenticeship with Mr. R. S. F. Greig at the Brisbane Hospital.

We congratulate Mr. Burns on his success, and extend to him best wishes for the remainder of the course.

QUEENSLAND CHEMISTS' GOLF CLUB

The final outing of the Queensland Chemists' Golf Club was held at the Oxley golf links on December 4.

The Captain, **Mr. R. S. F. Greig**, had the largest field of the season to contend with, and did a fine job getting away the forty-eight members and eighteen associates. The display of trophies in the clubhouse, which looked like an open day's trophy display at one of the larger metropolitan clubs, brought many comments, and we hope will bring many new members from the large crowd of male and female visitors who dropped in during the day.

The results of the competitions were as follows:—

Kenneth Mitchell Cup Final.—This cup was won by **J. McSweeney** in a play-off with **Jim Woods**, two up.

J. C. Wheeler Trophy.—A very fine putting display by **Miss Nell Adams** made her the winner of this fine trophy.

Four-ball Best Ball Stableford.—An excellent display in extremely windy conditions by **C. Jackson** and **K. Fox** gave this pair a trophy each for the cocktail cabinet.

A Grade Stableford.—This resulted in a win for consistent **J. Richardson**, who played very well in the windy conditions.

B Grade Stableford.—Another good display of golf in poor conditions made **R. Burke** the winner of this trophy.

Visitors' Trophy.—**J. Wiltshire** was a very popular winner for the competition among visitors.

President's Trophy.—A very popular win was that of **K. Bate**, who has been a trier on all occasions.

R. S. F. Greig's Associates' Trophy.—A newcomer to golf is **Jean Findlay**, who won her first "and there will be many more" trophy.

Nearest the Pin.—Our all quiet President, **A. G. Asprey**, was the winner of the "water" jug.

Club Trophy.—**P. Seeney** for consistent play during the season won his first trophy.

The President and Committee extend to all members and associates the Season's Greetings and good golfing for 1956.

CHEMISTS' BOWLING NOTES

Final play for the year took place against the Coorparoo Club on the afternoon of November 23. It is pleasing to report that the chemists were represented by seven rinks. Although the Coorparoo Club were

In Rheumatic Diseases

especially Arthritic and Fibrositic Conditions and
Gout, particularly in the chronic stage,

LEUCOTROPIN

has an immediate analgesic,
antiphlogistic and antipyretic
effect and increases Joint Mobility

Leucotropin causes excretion of Uric Acid
and stimulates A.C.T.H. production

Available in Ampoules of 5 c.c. or 10 c.c. and
Tablets

Literature and Samples from:

E.H. FLORANCE

Box 3122, G.P.O. Sydney, N.S.W.

N.Z. Office: P.O. Box 1296, Wellington, C.I.
Manufactured by Siltan Ltd., Hatfield, Herts, England

GOUT

is an Arthritic condition
but do your customers know it?

Sell them

FENBY'S GOUT PILLS

for instant relief

Wholesale, 6/4; Retail, 9/6
Your Profit, 3/2

FENBY PTY. LTD., Box 2524 G.P.O., SYDNEY

QUEENSLAND—Continued

the victors of the day, an enjoyable game was played
in ideal conditions. The scores were:—

Chemists		Coorparoo	
Dr. Moreton, Colville, Croker, Bell	30	13	
Nichol, Lewis, W. Lenehan, Dr.			
Waters	13	27	
Ross, Nolan, Hall, Coffey	19	33	
Vance, Macpherson, H. Lenehan, Fitzsimmons	26	18	
Dr. Jobbins, Allison, Macpherson, Ward	19	23	
Brown, Riddell, Howe, Waldron	26	30	
Atkins, Vacher, Kunze, Young	10	39	
	143	183	

Trophy spoons for the day's play were won by a Coorparoo rink.

This being the final day's play for the year, an informal tea at the clubhouse followed play. Thirty-three were present, and after tea a social evening was enjoyed. Some members who could not enjoy a roll-up during the afternoon came along to join the fun of the evening. Eric Roush was M.C., and he had the boys singing Christmas carols and community songs. Several artists provided individual items, and Ron Ward and Eric Roush also showed some of their films—all adding to the pleasure of the evening. Seasonal greetings were extended to all, and the club is now in recess.

The annual meeting will be held in January, and the first game in 1956 will take place in February. With the Interstate visit to Sydney and an interesting year's programme, 1955 has been a very successful and enjoyable year for the club. It is hoped that the coming year will prove equally so.

PHARMACEUTICAL SOCIETY

Council Meeting

The Council of the Pharmaceutical Society of Queensland met at Drysdale's Chambers, Brisbane, on November 10, at 8 p.m.

Attendance.—Mr. L. A. Stevens (Vice-President), Mrs. Carlson, Miss Chalmers, Messrs. R. S. F. Greig, J. E. McCaskie, H. G. E. Sneyd, G. R. Wells, J. M. McKenzie, F. M. Woods, I. Young and the Secretary.

Welcome to Mr. Young.—Before commencing the business of the meeting, Mr. Stevens, who occupied the Chair in the absence of the President, Mr. R. V. S. Martin, on leave, said it was his pleasure to extend a welcome to Mr. Young on behalf of the Council and himself personally. They trusted that Mr. Young's association with the Council would prove pleasant and profitable. In reply, Mr. Young thanked the Acting President for his welcome. He said he was looking forward to membership of the Council and he trusted that he would prove of some benefit to the Council.

Appointment of Sub-Committee.—Mr. Stevens said all members had received a copy of the appointments to the various sub-committees for the ensuing year. They were—

Poisons.—Messrs. L. A. Stevens (Chairman), R. S. F. Greig, H. G. E. Sneyd and F. M. Woods.

Social.—Mrs. Carlson, Messrs. I. Young, F. M. Woods, and J. E. McCaskie.

A.P.F.—Mrs. Carlson (Convenor), Messrs. J. M. McKenzie, J. E. McCaskie.

Library.—Mr. J. M. McKenzie (Convenor), Mrs. Carlson, Messrs. G. R. Wells and J. E. McCaskie.

Publications.—Messrs. R. S. F. Greig (Convenor), L. A. Stevens, G. R. Wells, I. Young.



This
Bird

**means
business !**



**Growing
BIGGER and
BIGGER
every year!**

Like Doc. Stork's, our business, too, goes on increasing year after year. For instance, our sales records for the last three years have scored an all-time high . . . and we're still growing.

*That's why the partnership of
YOU and JOHNSON'S means
business!*

Johnson & Johnson
PTY. LTD.

Takes his job seriously, does old Doc. Stork . . . and why not? After all, he's been in business a very long time, and he's still delivering new babies every minute of every day.

That means business, if you like, because all babies know that some of the nicest things about this new world of theirs are the things that Johnson's make: Baby Powder, Baby Cream, Baby Oil, Baby Soap . . . all so comfort-giving, so happy-making. No wonder they are products that sell fastest and sell continuously.

Get **YOUR** full share of this growing business, too! Display *all* your Johnson's Baby Products *together*, because that's how they work best and sell most rapidly.



**Johnson's
BABY PRODUCTS**

SAPODERM

This is a new soap for use in surgical scrubbing-up—whether of the surgeon's hands or of the operative field, or for the general control of skin infection in home, school or office. It is a first-class soap, containing hexachlorophene as the antiseptic substance, lightly perfumed to neutralise the faintly disagreeable odour of soap itself or of the antiseptic.

Hexachlorophene (otherwise known as G.11) is a complex organic compound recently introduced for the sterilisation of skin. Sapoderm contains 2 per cent. of hexachlorophene.

In Home, School and Office

Sapoderm is admirably suited for use in the home because of its bactericidal action and because it does not appear to have any irritating effect on the skin. Sapoderm is a cream-tinted soap, free from objectionable staining properties, and will be found very pleasant in use. The cake is of generous size (5 oz. approx.) and pleasantly shaped.

A "CHEMIST ONLY" SOAP

Distributed throughout Australia by all D·H·A houses

"HERMETTE"

SUCCINIC ACID THERAPY

We advise that we have the following packs available from stock, either direct or through your normal wholesale house, as follows:—

Sterile Succinic Acid Solution, 5%, buffered for intravenous injection.

10 c.c. ampoules, in packs of 6, 12 and 100.

20 c.c. ampoules, in packs of 6 and 25.

Sodium Succinate Tablets, 0.5 Gm., in packs of:

100, 500 and 1000.

Preliminary literature available on application.

Messrs. L. Gunzburg & Co.,
19 Pier Street,
PERTH, W.A.

Messrs. H. H. Pearce Pty. Ltd.,
148 Collins Street,
HOBART, TASMANIA.

NEW ZEALAND
Direct Enquiries
Welcomed.

DAVID G. BULL LABORATORY PTY. LTD.
61 COLLINS STREET, MELBOURNE, C.I. Phone MF 5779

Benevolent Fund.—Messrs. R. V. S. Martin, L. A. Stevens, G. R. Wells and H. G. E. Sneyd.

Liaison Representatives.—Messrs. R. V. S. Martin, L. A. Stevens, R. S. F. Greig.

Medico Liaison Representatives.—Messrs. R. V. S. Martin, L. A. Stevens, H. G. E. Sneyd.

Finance.—Messrs. R. V. S. Martin, L. A. Stevens, G. R. Wells.

Journal Readers.—"A.J.P., Miss Chalmers; "Pharmacy International," Mr. Woods; "British Pharmaceutical Journal," Mr. Young.

Report re A.P.F.'s.—The Secretary reported that since last meeting, Mr. Kent had advised that the Association would be able to make 200 further copies of the A.P.F. available. Mr. Kent reported that the demand had exceeded all expectations and there would probably have to be a reprint.

After discussion, Mr. Greig moved that in the event of a reprint being made that this Society will purchase another 400 copies. If the Association can spare another 100 copies from its present reserve in the near future, this Society would be pleased to have this extra stock. Seconded by Mr. McCaskie. Carried.

Correspondence.—To Mrs. O. C. V. Leggo, conveying the sympathy of the Council on the death of Mr. Leggo.

To Mr. Pratt, Engineer, Mt. Crosby, thanking him for his assistance in making the Pharmacists' Picnic on September 25 at Mt. Crosby an enjoyable occasion.

From British Medical Association (1) Re eighth edition A.P.F., noting that it will be adopted as from October 1; (2) Advising that, as requested, members will be informed of the unethical practices adopted by some doctors.

From Director-General of Education, with regard to extra space at the Central Technical College. Forwarding copy of reply from the Principal of the College with regard to space for pharmacy students.

From Pharmaceutical Association of Australia, report of preliminary meeting in connection with the conference to be held in Melbourne in May, 1956.

From Pharmaceutical Public Relations Secretariat, advising on the National Health Bill and the Taxation of F.S. Dispensaries.

New Member Elected.—Mr. H. J. Ellway, Southport.

Pharmacy Board.—In the absence of Mr. Martin, Mr. Greig reported on items coming before the Board which would be of interest to the Council.

Next Edition of Bulletin.—For the perusal of the Council, the draft of the next edition of the Bulletin was submitted. After discussion, it was resolved that this Bulletin be the last for the year and that Christmas Greetings be included. If possible, it was agreed that a Bulletin be issued in January. It was resolved that this issue be left in the hands of the Executive.

Vacancy on Council.—Mr. Greig said, as Mr. Williams had resigned, there would be a vacancy on the Council, and he inquired whether it was the Council's intention to call for nominations to fill this vacancy.

Mr. Stevens said following customary practice and as laid down it would be necessary to call for nominations to fill the position.

Mr. Greig moved that the action under the Constitution in calling for nominations for a new member be set in motion. Seconded by Mr. Sneyd. Carried.

Prescription Book.—Mr. Woods reported that since last meeting he had been able to obtain from Miss Minnis, on loan for several months, one of the first prescription books used in Queensland. It was dated 1862 and it was probably one of the first books used in Ipswich. He said members might care to peruse it as Miss Minnis had kindly loaned it to the Council for several months.

The meeting closed at 10 p.m.

Beauty means business
when you receive

68% PROFIT

ON *Lournay*

Beauty Preparations

* With cosmetic sales increasing yearly, and the bulk of them being made through Pharmacies, you'll find it pays to stock . . . LOURNAY . . . virtually the Chemist's own cosmetic range.



Backed by strong-selling national advertisements, all carrying the Chemists' Guild Insignia, and attractive display material.

Lournay

means more sales

more sales mean

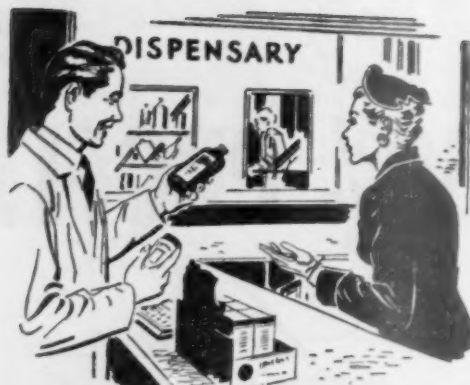
MORE PROFIT!



QUEENSLAND—Continued

THE GUILD

**S.B.C.
Meeting**



CONTEX Adding Machine Sells More Chemists' Lines

How? Your specialised, personal type of business demands a maximum of time with your customers. Context gives you additional time by streamlining your figure problems and reducing your "office" hours.

Context gives you rapid, accurate calculations—you save time doing your books.

This simple, speedy, accurate machine adds in whole numbers, f.s.d., decimals, weights and measures.

Context is so simple to operate you can master it in five minutes. Over 16,000 already in use in Australia! Put Context to work for you.



Handsome
carrying
case,
55/- extra

£23'10'.

CHARTRES LTD.

169 LIVERPOOL STREET, SYDNEY. PHONE M0425

TO: CHARTRES LTD., 169 Liverpool St., Sydney.

Please send me more details of the Context.

NAME _____

ADDRESS _____

P.J.CO33.16

The State Branch Committee of the Queensland Branch of the Guild met at Drysdale's Chambers, Brisbane, on December 1, at 8 p.m.

Attendance.—Mr. W. A. Lenehan (President), Messrs. C. A. Nichol, F. H. Phillips, W. E. Martin, A. B. Chater, L. W. Huxham, L. Hall, A. Bell, G. Nolan, C. W. Noble and the State Secretary.

Annual Report.—The President reported that copies of the Federal Guild annual report, which was presented to the Federal Council at its annual meeting, were now available for each member of the Committee.

A report of the Trade and Commerce Conference held last August had also come to hand. This report would be held at the Office.

Packed Goods Price List.—The Secretary reported that the new reprint of this list had now been received from the printers and would be distributed to members.

Members referred to the amount of work entailed in the preparation of this list and it was agreed that appreciation of Mr. Huxham's work in the compilation of this list should be recorded in the minutes.

Mr. Huxham said this was probably the most controversial price list published. Quite a deal of work had been put into its compilation and he hoped that it would be of value. He wished to express his appreciation of the valuable assistance he had received from other members.

Meeting of Doctors and Chemists.—Mr. Lenehan reported that he had been in touch with Mr. Doyle. The matter had not been forgotten. Mr. Doyle was making preliminary inquiries and he was hoping that it would be possible to arrange for a combined meeting in the New Year.

New Members Elected.—Messrs. W. R. Buckby, Stafford; S. J. Goodrick, Toowoomba; W. Ritchie, Yeronga, and E. C. Lindsay, Cairns.

Branch Recordings.—Mr. R. A. Sawyer, Strathpine, and Mr. L. Cristaudo, Kirra.

Correspondence.—To Mr. F. B. Coleman, Queensland Department of Agriculture and Stock, inquiring if it would be possible to obtain 500 copies of the booklet containing the registered veterinary medicines in Queensland and if so the approximate cost of same. Reply stating the Department was pleased to make a quantity available for distribution to chemists. Unfortunately, only 250 copies were available, but these could be distributed to country members. The Secretary said she had written thanking Mr. Coleman for his assistance.

The Federal President's letter to all committee members was tabled.

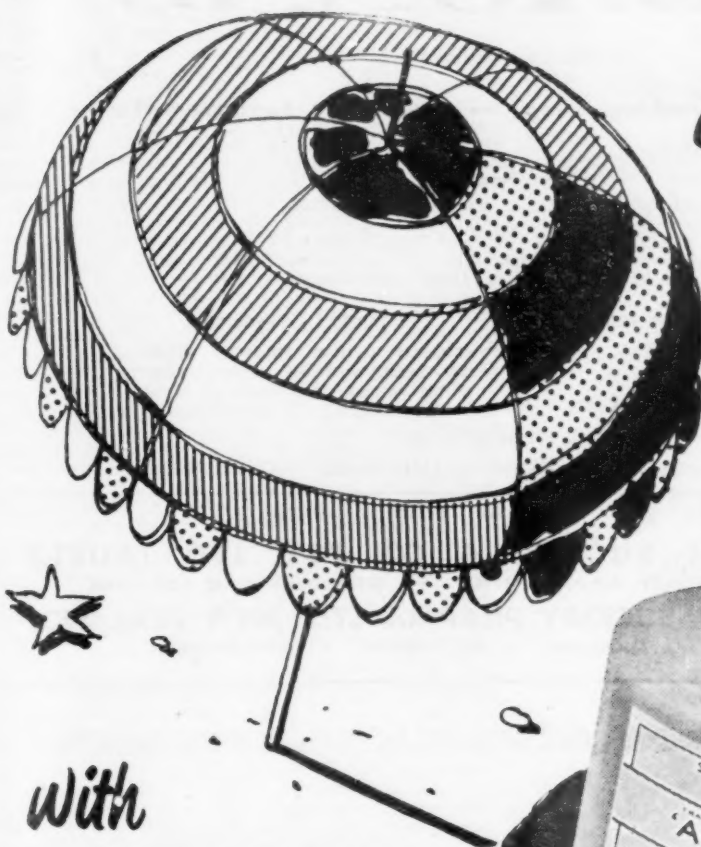
Copy of communication sent by the Pharmaceutical Association to the Comptroller-General, Department of Trade and Customs, concerning the permissible use of methylated spirit in the preparation of medicine for external use for human beings was tabled for information.

From P.A.T.A., seeking the names of the Guild representatives for the ensuing year. The Secretary reported that Mr. Delahunty and Mr. Hall had represented the Guild in the past, and pending confirmation at this meeting these names had been forwarded for the ensuing year. Mr. Noble moved, Mr. Martin seconded, that the appointments be confirmed. Carried.

From Taxation Standing Committee, requesting the names of the Guild representatives for the ensuing year. Mr. Nichol moved, Mr. Phillips seconded, that Mr. Bell and Mr. Noble represent the Guild on this committee. Carried.

Reports.—Mr. Martin reported on correspondence he had received as Federal Delegate during the month.

"Family Circle."—Mr. Huxham said on his tour of



a place in
the Sun..

With
'ANTHICAL'
LOTION

For prompt, soothing and cooling relief in sunburn, insect bites and pruritus associated with a variety of conditions in adults and children, your customers will welcome 'Anthical'.

'Anthical' is not just another cosmetic covering for irritating and often unsightly skin conditions. It is more than that. It contains mepyramine maleate, quick acting antihistaminic and analgesic affording hours of relief from pain and itching; and zinc oxide, widely used for its non-toxic sedative and astringent properties.

'Anthical' is an elegant and stable suspension. Its smooth creamy consistency and natural flesh-tinted colour, plus its pleasant odour and non-staining properties will immediately commend it to all users.



MANUFACTURED BY

MAY & BAKER LTD

AN M&B BRAND
MEDICAL PRODUCT

SUPPLIES: BOTTLES OF 4 FL. OZ


DISTRIBUTORS: MAY & BAKER (AUSTRALIA) PTY LTD

5 PHILLIP STREET, SYDNEY. TEL. BU 3621 (3 Lines). 286 LYGON STREET, CARLTON, N.3, MELBOURNE. TEL. FJ 5780.

PLEXONAL

HYPNOTIC - SEDATIVE

Offers a new way to refreshing sleep — free from hangover the next day

EACH PLEXONAL  CONTAINS

Sodium barbitone	45.0 mg.
Sodium phenobarbitone	15.0 mg.
Sodium isobutylallylbarbiturate	25.0 mg.
Dihydroergotamine methanesulphonate	0.16 mg.
Scopolamine hydrochloride	0.08 mg.

2 TABLETS TAKEN AT BEDTIME PROVIDE

- RAPID ONSET OF ACTION
- 6-8 HOURS DURATION OF SLEEP
- FREEDOM FROM HANGOVER
- WIDE THERAPEUTIC MARGIN OF SAFETY

1 TABLET t.d.s. PROVIDES

ADEQUATE DAYTIME SEDATION WITHOUT
INTERFERING WITH THE NORMAL ACTIVITY
OF THE PATIENT.

PACKING: BOTTLES OF 20—200

A product from the laboratories of SANDOZ LTD., BASLE, SWITZERLAND



Literature is available on request from:

H. H. BUCKLEY & CO. PTY. LTD. (AUST.)

SYDNEY: G.P.O. BOX 3695 • MELBOURNE: G.P.O. BOX 1613M

H. H. BUCKLEY PHARMA LTD. (NEW ZEALAND)

AUCKLAND • WELLINGTON • CHRISTCHURCH

The
**Season's
Greetings**



to all our customers throughout Australia

from

DORMAY COMPANY PTY. LTD., 29 REIBY PLACE, SYDNEY.

inspection with Colgate's as Guild representative in the judging of the window dressing competition, the general impression was favourable towards "Family Circle." It was felt that by degrees things would settle down and the publication would prove a good steady magazine.

Pharmacy Board.—Mr. Nichol reported on Board activities.

Mr. Chater reported that for several years now it has been the practice of the Board to send out a reminder regarding the payment of £1 to register a permanent manager or locum for a year. As this memo had not arrived this year with the usual licence fee notice, he had made inquiry at the Board meeting recently and had been informed that this year the Board would not be sending out this reminder. Mr. Chater said he felt that members' attention should be drawn to this matter. They should be advised that at the commencement of the year another £1 was due for the registration of a permanent manager or locum. Mr. Chater moved, Mr. Bell seconded, that a letter be sent to the Board requesting that that body in future send out reminder notices regarding registration of managers and/or locums with the annual licence fee account. Carried.

Window Display Competition.—Mr. Huxham said that at the request of the President he had accompanied Colgate's Manager viewing the windows entered in the window-dressing competition. Mr. Huxham said he was finding the job most interesting and he thought each member of the Committee should take it in turn to participate in the judging each year. Mr. Huxham said there was not a lot of originality shown. While there were some very good windows, the interior was often neglected. One big fault was lack of pricing, especially in the windows. He felt that it was at all times essential to have the prices shown on all articles on display in the window. Mr. Huxham said he would have more to report at next meeting.

P.A.T.A.—Mr. Hall reported that Mr. Delahunty and he had that day attended the annual meeting of P.A.T.A.

Photographic Competition.—Mr. Lenehan said Mr. Farmer, of Everton Park, was very keen to have a photographic competition among chemists. He thought this would create interest among pharmacists and in the long run might help them in their photographic business. Many chemists were keen photographers and had a large photographic business, and it was felt that possibly the Guild would find a prize for the competition.

Mr. Martin said the suggestion had some merit, but he felt that Mr. Farmer should be asked to put his proposals in writing, so that the Committee could give further consideration to them. He moved that Mr. Farmer be asked to put his proposals in writing. Seconded by Mr. Phillips. Carried.

Mr. Huxham said he was very keen on photography and he agreed the suggestion had some merit. He would be pleased to call and discuss the project with Mr. Farmer.

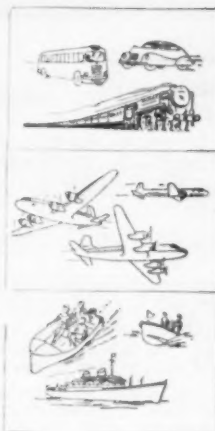
West Moreton Zone Christmas Party.—Following their usual custom, Mr. Nolan said the members of this Zone would be entertaining their staff to a Christmas party in Ipswich on December 12, and they would like representatives of the State Branch Committee to be present on this occasion. Mr. Nolan said as Chairman of the Zone he had much pleasure in extending a cordial invitation to each one to be present.

Mr. Lenehan thanked Mr. Nolan for the invitation and said he would be pleased to accept. He trusted that it would be possible for other members of the Committee to be present also.

Seasonal Greetings.—This being the final meeting of the year, Mr. Lenehan said he had much pleasure in conveying good wishes to members and their families for the coming festive season. He trusted all would have a very Happy Christmas and he looked forward to seeing them all in the New Year. Those present reciprocated Mr. Lenehan's good wishes.

The meeting terminated at 10.30 p.m.

WHEN A CUSTOMER TRAVELS ON



Wheels, Wings or Water

There are extra
profits for you!

Tell your customers what recent medical and pharmacological research and extensive tests proved about ANDRAMINE in motion sickness. Explain how the chemical compound of Chloro-theophylline with the Anti-histamine substance of Beta-dimethylaminobenzhydryl ether in easy-to-take ANDRAMINE Tablets has been proven non-toxic and free from unpleasant side-effects—is absolutely safe and effective. Help your customers beat the age-old evil of travel sickness, and earn welcome, extra profits for yourself! Stock and recommend ANDRAMINE Tablets.

ANDRAMINE Tablets for Adults, 12 for 3/6
ANDRAMINE (Junior) for Children, 12 for 3/-

ANDREW'S Andramine

(Brand of Beta-dimethylaminobenzhydryl ether & Chloro-theophylline)

TABLETS

FOR TRAVEL SICKNESS

AL 48.112

SOUTH AUSTRALIA

PERSONAL and GENERAL

State News

Members desiring publication of personal items of interest are invited to write or telephone details to the Journal Correspondent in S.A., Mr. E. F. Lipsham.

Mr. G. Valente is now managing Sauer's Pharmacy in Morphettville.

Mr. H. B. Miller, of Unley, returned from his trip to England at the beginning of December.

Miss Garhutt, from Queensland, has joined the staff of the Pharmacy Department of the Royal Adelaide Hospital for a few weeks and will then return home.

Mr. R. Brice has acted during the month as relieving manager for Mr. J. Wollard, of Park Terrace, North Unley, and for Mr. D. Cock, of Glenelg.

Mr. L. Shute was in charge of Twer's Pharmacy, Parkside, during the absence on holidays of Mr. E. Cartier.

During examinations in November **Mr. M. Palk** assisted at the pharmacies conducted by Messrs. Porter and Penhall at Albert and Royal Parks.

During the absence of the proprietor, Mr. D. Lingham, in the early part of November, **Mr. R. Walker** was in charge of his principal's pharmacy in Whyalla.

Mr. H. B. Flood is opening a new pharmacy on Seacombe Road, Seacombe Park, after completing his engagement with F.S.M.A.

Mr. J. Maine has resigned his position with Mr. J. Duncan, of Gawler, and purchased the pharmacy conducted by Mr. M. Eckersley at Riverton, together with the branch pharmacy at Saddleworth.

News of **Miss P. Stanley** in London is that she has seen Ken Rholffing and Yvonne Fricher, and is working in a retail pharmacy, but not liking the hours of 9 a.m. to 6 p.m. on Saturday.

Mr. J. M. White, late of Waikerie, who acted as locum for Mr. K. S. Porter, President of the Pharmacy Board, of Albert Park, during the two weeks of the final examination, has purchased the pharmacy conducted by Mrs. McCook (Ennor's Pharmacy, Charles street, Adelaide).

Mr. J. C. Beilby has been successful in completing the course for Bachelor of Medicine and Surgery at the University of Adelaide. Another big event for Jack in the near future is his marriage to Mary Croft on January 7 next.

Mr. N. Russell has resigned his position with A. Michaels & Son to open a new pharmacy in Elizabeth. His place as manager of the Alberton branch will be taken by Mr. E. Beaty, from the Port Adelaide branch.

Mrs. C. Wilkins has been assisting at Warren's Pharmacy in John Martin's and at Henry Francis & Co., in the Myer Emporium, during the absence on holidays of Miss Maine and Mr. R. Mudie. She then acted as locum for two weeks at Mr. R. Fisher's Pharmacy in King's Park.

Miss Mary Prague Searson and Mr. Stephan Noel Leyshon, who have announced their engagement, are planning to marry in October. Miss Searson, who is doing her final year nursing at Calvary Hospital, is the daughter of Mr. and Mrs. G. R. Searson, of Brighton. Mr. Leyshon is the son of Mrs. E. M. Leyshon, of Kilkenny, and the late Mr. S. J. Leyshon.

BIRTHS

Teakle.—On November 17, at Glenelg Community, to Mary, wife of John, a daughter.

Southam.—On November 11, to Pamela, wife of Tony, a daughter.

Clarke.—On November 27, at S.C.D.H., Victor Harbour, to Nola, wife of Trevor, a son, Ian Trevor.

Humble.—At Port Pirie, to Mr. and Mrs. W. Humble, on December 3, a daughter.

Floor (nee Hampel).—To Isabel, wife of David, on December 4, at Calvary, a daughter.

WOMAN DIES OF POISONING

Clarice Sleight, 44, married, of Queen Street, Pennington, died in the Royal Adelaide Hospital after drinking weed killer containing arsenic. When Mrs. Sleight was admitted to hospital she told doctors she mistook the weed killer for cordial.

BIRKS PHARMACY MODERNISED

Birks Chemists Ltd., one of Adelaide's best-known pharmacies, has recently undergone renovations which, according to reporters, have produced a modernistic trend which makes the building an even more prominent landmark that it formerly was. New style fittings enable a comprehensive display of merchandise to be easily seen and quickly served. Display counters are well stocked with pharmaceutical requisites, medicines, cosmetics, cameras, etc. A bright contemporary colour scheme in conjunction with full use of natural lighting provides ideal shopping conditions. An up-to-date modern dispensary is situated at street level.

Further references to Birks' new pharmacy are given on page 1505.

BURST HOSE FLOODS CITY SHOP

Four floors of Birks Chemists Ltd., Rundle street, City, were flooded during the month when a water hose burst on the fourth floor.

A passerby reported to police at 6 a.m. that water was running under the doors into the street.

The Fire Brigade was called and firemen spent two hours sweeping the inches deep water from the floor.

Opening of the shop was delayed about an hour.

The flooding was caused when a water hose burst on a distilled water plant which operates 24 hours a day on the fourth floor.

Only slight damage was caused to stock, but water soaked office records and equipment and damaged walls and ceilings.

MEDICAL PRACTITIONERS' ACT—AMENDMENT IN PARLIAMENT

An Act to amend the Medical Practitioners Act was introduced in the Legislative Council by the Hon. Sir Lyell McEwin, on November 16.

The main proposal contained in the Bill is that every person registered after June 30, 1958, as a medical practitioner will be required to serve as a resident medical officer for at least twelve months in a hospital before he commences practice.

The Minister said the Bill had been prepared pursuant to a request which was made by the Faculty of Medicine, Adelaide University, with the support of the

ROUSSEL **LABORATORIES** LTD.

New distribution arrangements.

By mutual arrangement the
distribution of ROUSSEL products
was transferred on
1st November 1955

from

MESSRS. FASSETT & JOHNSON

to

MESSRS. POTTER & BIRKS PTY. LTD.

120 Pacific Highway
St. Leonards - Sydney
New South Wales

**For Fine Chemicals
of Finest Quality**

CONSULT

HENRY H. YORK & CO. PTY. LTD.

62 Clarence Street,
SYDNEY.
Phone: BX 3151.

573 Lonsdale Street,
MELBOURNE.
Phone: MU 8673.

LOOK TO YOUR STOCKS
OF THESE LINES THAT
***SELL FASTER
& OFTENER***

DISTRIBUTED BY
H. C. SLEIGH LTD.
Melbourne, Sydney & Interstate Agents



SOLD ONLY BY CHEMISTS

PROPAIN
Synergised A.P.C.
POWDERS AND TABLETS
Pharmacy's answer to the open seller.

VAXOS N°1
ORAL VACCINE
Recommend it with confidence for
COLDS, CATARRH AND HAY FEVER

Dr Newell's
EYE DROPS
Fastest Selling Eye Drop in Australia Today!

SOUTH AUSTRALIA—Continued

University Council and the Medical Board of South Australia.

The proposal was similar to a scheme in New South Wales which had been brought into operation in November of last year.

New Zealand and the United Kingdom had similar legislation although there were slight differences.

The South Australian Bill requires the medical practitioner to have hospital experience after he is registered, but before he commences private practice. New Zealand and the United Kingdom require hospital experience after graduation, but before registration.

The Hon. F. T. Conden secured an adjournment of the debate.

CONTROL OF PHYSIOTHERAPISTS

Amending Bill in Parliament

A Bill to amend the Physiotherapists Act was introduced in the Legislative Council on November 8, by the Hon. C. R. Cudmore, who explained that the object of the Bill was to empower the Board to impose penalties for unprofessional conduct by physiotherapists.

Mr. Cudmore said the provision of a maximum fine of £20 was ridiculous. In his opinion anything less than £100 would be stupid.

Mr. Cudmore moved that the amount £20 be struck out and the amount £100 per inserted.

The Hon. H. E. Anthoney said it seemed that a Board clothed with powers which Parliament had given it had not power to punish an offender such as the one who had been mentioned by the Minister, for treating a case of cancer. He agreed with Mr. Cudmore.

DANGEROUS DRUGS ACT AMENDMENT IN PARLIAMENT

Debate on the Dangerous Drugs Act Amendment Bill which was adjourned in the Legislative Assembly on August 30, 1955, was resumed on November 15.

Mr. O'Halloran, Leader of the Opposition, said the Bill has already been scrutinised in another place, and he took it that that Chamber, with its usual perspicacity, had presented the Assembly with a piece of legislation beyond criticism.

So far as he could gather the principles it established were worthy. It rendered the Act more comprehensive and at the same time gave it a flexibility that it did not at present possess. It made possible the extension by proclamation of the prohibition on the use of certain drugs to any of their derivatives. That was an excellent provision because it prevented people from circumventing the Act by deriving something from a drug that could have all the other properties of a drug without being covered by a rigid definition of a drug in the legislation.

The legislation also was an attempt to produce uniformity throughout Australia of legislation concerning narcotics. He supported the Bill, which was taken through its remaining stages without amendment.

CHEMIST MANAGERS' PROPOSED AWARD

His Honour, Mr. President Pellew, gave reserved judgment in the Industrial Court this month on conflicting applications by employers and employees, heard together, for a new award covering persons filling managerial positions in retail chemists and druggists' shops, and in retail dispensaries throughout the State.

The making of the award was postponed pending a conference between the parties on a minor matter raised.

On behalf of the employers the award claims sought

The PIED PIPER

message is heard by the whole family

The PIED PIPER

message sends buyers to chemists
throughout Australia

The PIED PIPER

is a top-line radio programme broadcast on the Macquarie National Network and co-operating stations, sponsored by

SCOTT & BOWNE

(AUSTRALASIA) LTD.

Cnr. Riley & Devonshire St., Sydney. Phone FA 3090.

Manufacturers of the quality products.

SCOTT'S EMULSION — KEMDEX

STA-BLOND SHAMPOO — VIKELP

BRUNITEX SHAMPOO — VYKMIN

SKOL SUN TAN LOTION

*Line up with the Pied Piper
and help yourself to more
business*

**For all types of
point-of-sale advertising
that really works
contact**

ROYCO

**(AUSTRALIA) PTY. LTD.
9-15 Queensbridge Street,
South Melbourne S.C.A**



"Point-of-sale" advertising means an immediate upward trend in the sales chart.

The creation of sales-winning displays, backed by the kind of merchandising counsel that only long experience makes possible is pre-eminently a matter for Royco, acclaimed the national leaders in point-of-sale display merchandising.

Royco offers attention-winning sales-producing services, each of which can help you achieve greater dominance in your particular market.

ROYCO COMPLETE SERVICE

Sales Promotion Division: Window Displays • Showcards—designs and copy • Posters • Ticket-writing • Signwriting • Silk screen printing.
Constructional Division: Shop fitting—store layout • Display units • Cut-out letters (any material) • Exhibition stands • Window units.

SOUTH AUSTRALIA—Continued

a weekly wage of £20/3/6 for male managers, and of £18/12/- for male relieving pharmaceutical chemists.

The corresponding weekly pay proposed for females performing the duties of the two above classifications were £15/2/6 and £13/18/- respectively.

The employers requested a 42½ hour working week.

For the employees concerned, the only wage claim made was £24 a week for male and female managers.

A working week of 40 hours was sought — between 8.30 a.m. and 6 p.m., from Mondays to Fridays; and between 8.30 a.m. and 11.30 a.m. on Saturdays.

Since 1948, the award rate has fixed the weekly wages at £16/14/- for managers with the duty of buying, and at £16/1/6 for those without such a duty. The working hours have been 42 a week.

In his judgment, his Honour said that in all the prevailing circumstances, a 42-hour working week was justified.

The new award fixes the minimum male wage at £19/13/6 a week, which, when special pay rates are added for work done on Saturdays, Sundays and public holidays, will approximate at least £20/10/-. The prescribed minimum rate for females is £14/15/- a week.

Having regard to the numerous duties of managers, his Honour continued, he did not think that a manager who was not called upon to buy should be reduced in his wage rate because of that circumstance. He would not follow the current award in that matter.

Mr. R. H. Dunn, with Mr. G. C. Lane, appeared for the Friendly Societies' Medical Association, and the Federated Pharmaceutical Service Guild; and Mr. R. E. Bannister for the Federated Miscellaneous Workers' Union.

THE GUILD

**S.B.C.
Meeting**

The State Branch Committee of the South Australian Branch of the Guild met at 254 Sturt street, Adelaide, on December 10, at 7.30 p.m.

Present.—The President (Mr. H. G. Collyer) and Messrs. E. Lloyd Miller, A. C. Holloway, G. K. F. Scott, V. L. Mitchell, R. R. Patrick, A. A. Russell, J. Retallick, Walter C. Cotterell and the Secretary.

Dispensing Fees.—Mr. Russell asked whether it was the intention of this State Branch Committee to approve of the recommendation of the Pricing Officer's Conference that the dispensed price of medicine being calculated to the nearest 3d. be discontinued, and that the calculation be made to the upper 3d. This was approved.

It was also resolved that the question of dispensing fees after hours, as per Victorian Dispensing Lists, be referred to the Pricing Officer for rewording before going to print.

New Members Elected.—Mr. J. E. Maine, Riverton, and Mr. H. B. Flood, Seacombe Park.

Alteration to Membership.—Mr. J. Carnie has closed his shop at Barmera, and taken over the business of Mr. J. J. Kelly at Port Lincoln.

SOUTH AUSTRALIA—Continued

Newell's Eye Drops.—Secretary to notify Messrs. Searcy & Co. that all members should be approached. **Nada.**—Received with approval.

Financial Statement was presented to the meeting and approved, and accounts amounting to £22 were passed for payment.

Department of Agriculture.—Refer to Mr. Miller to report on same to next S.B.C. meeting.

Tender Board.—The Secretary reported that he had contacted Mr. Trevelyan in respect thereto, and it was decided to let the matter rest.

E. E. Hogben.—Re "Two for one" offers. Members to be notified again re this matter.

Department of Health.—Copies of the amendments to the Health Act distributed to the President, Vice-President, Federal Delegate and Pricing Officer.

Federal Delegate's Report. The Federal Delegate (Mr. Cotterell) gave a resume on the following matters:—Pfeiffer Foundation Scholarship, National Health Act, Sulpha Triad, Cutex, Kwik Tan, Pharmatex, Kodak.

Pricing Officer's Report.—The Pricing Officer (Mr. G. K. F. Scott) gave a resume on the following items:—Copy of Letter to Mr. Copeland re Elastoplast, Dexsal, Bottle and Container Prices.

Business for Next Meeting.—The following matters were directed to be placed on the agenda for the next S.B.C. meeting:—

- (a) Re closing on Saturday or Sunday nights.
- (b) Re Federal Council to control all prices of Dispensing fees.
- (c) Wages Award for Managers.

General.—The Secretary was requested to write Mr. Hennessy and Mr. Finlayson in respect to their illness.

The President in closing the meeting invited all members and their wives to supper at the home of Mr. Holloway, and wished all present the Compliments of the Season. This was suitably responded to by Mr. Miller.

Mr. Russell extended the S.B.C.'s compliments to the Secretary and his colleagues for the services rendered. This was approved unanimously.

BIRKS CHEMISTS' SHOP GETS A NEW LOOK

Renovations with a modernistic trend have made Birks Chemists Ltd. an even more prominent Rundle street landmark, says "The News" (23/11/55).

In the latest store design, the new fittings enable a comprehensive display of merchandise to be easily seen and quickly served.

A bright contemporary colour scheme, in conjunction with full use of natural lighting, makes shopping conditions ideal.

The new shop front in Rundle street is in an angled recessed design made of stainless steel. Window backings have been omitted from both Rundle street and Gawler place alignments, giving a direct view into all parts of

A NEW PERTUSSIS PROPHYLACTIC

Developed by the Commonwealth Serum Laboratories

Haemagglutinin Aluminium Phosphate Adsorbed

(H.A.P.A.)

This product is a specially prepared extract of virulent pertussis organisms, adsorbed on a mineral carrier; it is stable and accurately standardised for potency.

Immunisation with H.A.P.A. may be commenced at the age of three months and requires only two injections instead of the usual three or four required for other pertussis prophylactics.

H.A.P.A. is available as follows:—

Ampoule containing 0.5 c.c.	...	3/-
Ampoule containing 5 c.c.	...	11/-
Set of 12 x 0.5 c.c. ampoules	...	£1/4/-
Set of 12 x 5 c.c. ampoules	...	£6/-

Supplies may be obtained through your wholesaler, from all offices of the Commonwealth Department of Health throughout Australia, and direct from:—

COMMONWEALTH SERUM LABORATORIES, PARKVILLE, N.2, Victoria, Aust.

S0104

SOUTH AUSTRALIA—Continued

the pharmacy as well as allowing the ingress of more natural light. At night tube lighting gives the interior a remarkably bright and attractive appearance.

The new floor covering is of mottled blue toning with nine-inch inlays in lime green every five feet; the effect is to give the appearance of a much greater width of central aisle than formerly.

The interior gallery running along the upper side walls has been painted in fiesta and primrose. An interesting change is the provision of wooden overhead bars running across from side to side at a height of about nine feet. These bars are painted dead white and show plainly against the ceiling painted in the new grape colour. The whole is designed with the objective of stopping the public from unconsciously raising the eyes above the merchandise displayed on island cases.

The extensive gift section, located in the whole of the basement under the large pharmacy, has been provided with a new entrance, leading directly off Rundle street instead of the old system of all customers entering the main shop.

This entrance includes several shadow boxes inset into the wall alongside the stairway; these being small they can be readily filled with different displays from day to day.

The island glass cases in this section of the establishment have had their wooden bases painted so as to provide panels of four modern colours, namely, fiesta, blue, primrose and grape, so as to enhance the value of the artificial light required below street level.

The front or Rundle street section of the gift depart-

ment, has been arranged with light wells below the actual footpath. The bottom sections of the front windows, normally filled in with bricks and tiles, has been constructed as a transom, filled in with plate glass; the result being that customers can look down directly on to the gifts displayed below. At night this novel feature halts the window shopper.

Another big change has been introduced in the dispensing department of the pharmacy at street level.

Actual dispensing has been moved to the fourth floor of the building, but the receiving and delivery desks will remain in the old position at the rear of the pharmacy. The pelmet of corbyn quartz has been kept intact on the wall of the mezzanine office, together with the side pillars of Australian oak which act as pedestals for carboys filled in the usual bright colours.

The similar retention of the rows of ointment jars and other display of apparatus ensures that those who present prescriptions will not miss the activity of the dispensing department, now moved to quiet and more appropriate surroundings.

The Adelaide "News" in their issue of Wednesday, November 23, closed their account of the new design with the words—

"Founded 79 years ago by two of Adelaide's leading pioneers, George Napier Birks and William Hansen Birks, Birks Chemists Ltd. have extended from their headquarters at the corner of Rundle street and Gawler place to branches at 278a Rundle street and Port Adelaide.

Marketing under the trade name of Marva they are also manufacturing as well as retail chemists. Directors are Messrs. E. V. Lawton, G. M. Dixon, and Mrs. E. M. Magarey."



Illustration by courtesy of "The News," Adelaide.

MORE PROFIT

IN THESE PHOTOGRAPHIC WINNERS!

Once again Hanimex introduce real photographic money spinners! Send for the new 88-page Photo Equipment Handbook for full details.



NEW WOTAN BULBS BRING LOW-COST FLASH PHOTOGRAPHY

An entirely new range of Wotan Vacublitz flash bulbs has just been released by Hanimex to bring the cost of flash photography down still further. The new bulbs are the Wotan XM-1 and XM-1B, which are marketed with a special adapter to allow use in any flash gun. Retail prices are: XM-1, 1/2 each; XM-1B (blue), 1/4 each. Price of the adapter is 2/8. The bulbs are for use with X setting at 1/25 sec. or M setting at 1/100 sec. Light output is equivalent to that of bigger bulbs but cost is lower due to the use of the adapter. The new bulbs are sold in boxes of 5, and are designed for maximum light output even with the small reflector of the popular pocket-size flash gun.

HANIMEX DIGNA 120 CAMERA

An all-metal 120 roll film size camera which takes 12 exposures 2 1/4" x 2 1/4". The camera body is made entirely of die-cast steel. All models are synchronised for flash photography and feature a telescopic viewfinder, body-release and accessory shoe.

The Digna camera is available in three popular models:



DIGNA f8 Achromat lens, B1 shutter — — £3/15/-

DIGNA f4.5 Sublite anastigmat lens in Vario shutter, B, 1/25, 1/75, 1/200 sec. — — £7/15/-

DIGNA f2.9 Weston anastigmat lens in Pronto shutter, B, 1/25, 1/50, 1/100, 1/200 sec. £12/10/-

DIGNA Leather E/R Case (Standard) — — — — £1/8/-

DIGNA Leather E/R Case (De Luxe) — — — — £2/15/-

DACORA ROYAL 120 CAMERA



Takes 12 excellent pictures in colour or black and white on standard 120 size roll film. Special features include rapid film wind lever, which automatically transports the film and cocks the shutter. Has an independent built-in rangefinder with the same calibrations as the camera lens. The fully synchronised Pronto-SVS shutter has speeds of 1, 1/5, 1/10, 1/25, 1/50, 1/100, 1/300 sec. and Bulb with built-in delayed action release. Fitted with coated f3.5 Ennar anastigmat lens.

DACORA ROYAL, f4.5 Pronto — — — — — £13/19/-

DACORA ROYAL, f3.5 Pronto SVS — — — — — £16/19/-

Leather Eveready case, £3/10/-

HANIMEX PTY. LTD. 14 King St., Sydney. 'Phone BX 7281

376 Flinders Lane, Melbourne; 76 Ann Street, Brisbane; 3 Francis Street, Adelaide; 935 Hay Street, Perth; Auckland (N.Z.); San Francisco (U.S.A.).

The more you use it,
the sooner it's paid for



"Our operating costs were on the downward as soon as we switched over to a Burroughs Adding Machine. We saved time, money. Efficiency *plus* everywhere. In fact, the more you use it, sooner it's paid for. Our Burroughs is a once-in-a-lifetime investment."



"So easy to use the Burroughs Adding Machine. And you get accurate answers fast! Our Burroughs suits our needs exactly. (You can buy them electrically- or hand-operated. Wide or narrow carriages. Up to £9,999,999-19-11 capacities). It's a pearl!"

**this
adding
machine
pays
for
itself
in time
saved
alone!**

Call the  **Burroughs** man

1/55



Automatic Water Stills

CONTINUOUS IN OPERATION

If you want genuine distilled water, there's only one way to get it—by using a still. Whatever your process, a reliable and economical source of highest quality distilled water is always at hand when you install a MANESTY Automatic Water Still. Models are available with outputs from 2 pints to 50 gallons per hour.

Write today for full details of these models.

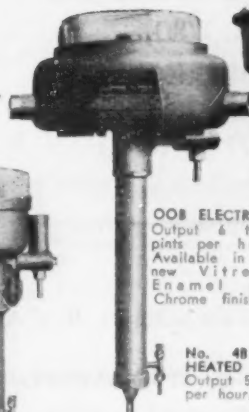
For details of Manesty Machines and Technical and Experimental Service write to:—
Sole Australian Agents: J. L. LENNARD, 29 Reiby Place, Sydney.
Victorian Representative: APROPAC & CO., 443 Little Collins Street, Melbourne.
New Zealand: J. L. LENNARD LTD., 327 Willis Street, Wellington.



ELECTRIC DESTIL
Output 2 pints per hour.



OB GAS
Output 3 pints per hour.



OOB ELECTRIC
Output 6 to 8 pints per hour. Available in the new Vitreous Enamel and Chrome finish.



No. 4B STEAM HEATED
Output 50 gallons per hour.

MANESTY MACHINES LIMITED

22 EVANS ROAD : SPEKE : LIVERPOOL 19 : ENGLAND.

TABLET MACHINES - COATING PANS - GRANULATORS - MIXERS - PUNCHES AND DIES

How do they make them so cheaply...?



This machine will produce six gross solid eau-de-cologne sticks per hour. The model illustrated is for products 23 mm. diameter, 46 mm. long, domed at one end, and can also be supplied to customers' special requirements. The whole machine can be mounted on rails to suit plant arrangements. Cooling time 3-4 minutes. Other machines are available for the rapid production of lipsticks and paraffin wax blocks. They provide the advantages of mass production at very reasonable cost.

H. B. ARDEN & Co. (Instruments) Ltd.

371 QUEENSBIDGE ROAD, LONDON. E.8

Telephone: Clissold 8302.

Telegrams Inland: "Cosmould, Hack," London. Overseas: "Cosmould," London.

JOUBERT & JOUBERT

PTY. LTD.

575-9 Bourke Street
MELBOURNE
MU 7277 (3 lines)

LACTOBYL :: TAXOL :: ROCAR

URALYSOL :: STANNOXYL

ENTROSALYL

(In Standard or Vitaminised Forms)

NEUTRAPHYLLINE

(Ampoules, Tablets with Phenobarbital,
Tablets Plain)

PANBILINE PILLS

PANBILINE--METHIONINE PILLS

URODONAL :: VI-GLOBEOL

LYXANTHINE :: TIODINE

CRÈME SIMON

(Jars & Tubes)

"Best British" RAZOR BLADES
(Slotted)

FALIÈRES' PHOSPHATINE

"GILSEAL"

COMBINE DRESSINGS

COTTON WOOL &
SURGICAL DRESSINGS

BRANNAN GUARANTEED THERMOMETERS

CLINICAL
INDUSTRIAL
HOUSEHOLD



Brannan's Clinicals include Standard Long Stem Clinicals and Stubby.

When ordering Thermometers, be sure of accuracy by insisting upon Brannan high-grade scientific instruments, made by skilled craftsmen in Great Britain's most modern Thermometer factories.

Brannan Thermometers cover every normal manufacturing and industrial requirement. Our experts will be happy to co-operate in creating special instruments to solve particular problems.

Resident Agents in Australia and New Zealand:

SYDNEY

Jones & Joseph Ltd.,
235 Clarence Street, Sydney

ADELAIDE

E. Bown Ltd.,
Worendo Buildings,
Grenfell Street,
Adelaide, S. Australia

BRISBANE

Jones & Joseph Ltd.,
City Buildings,
242 Edward Street,
Brisbane.

MELBOURNE

Baldwin & Slattery Ltd.,
Selby House,
318 Flinders Lane,
Melbourne

PERTH

L. M. Cullen & Co. Ltd.,
12 Howard Street,
Perth W. Australia

AUCKLAND, N.Z.

H. F. Wright Ltd.,
41 Albert Street,
Auckland, C.I.,
New Zealand

Thermometers of all types are now available with prompt deliveries and at keen prices.

Manufactured by

S. BRANNAN & SONS LTD.

London and Cumberland, England

Export Branch:

LYALL WILLIS & CO. LTD.,
DRAYTON HOUSE, LONDON, W.C.1, ENG.

* Another product from the house that makes the famous Solila Needle



THE

LAMINEX

RECORD SYRINGE

with the CERAMIC PISTON permits auto-clave sterilisation with the piston in position

The ceramic piston is of fine porcelain fired at high temperature and possessing the same coefficient of expansion as the pyrex glass barrel.

It is completely impervious to chemical attack and in every respect is more suitable for the purpose for which it is used than any known metal.

The calibrations are effected by fusing ceramic pigment into the glass barrel at high temperature and are immovable in any circumstances.

* AN "EVERETT" PRODUCT

OBTAINABLE FROM YOUR MEDICAL SUPPLY HOUSE

Sole Wholesale Distributors:

The Amalgamated Dental (Aust.) Pty. Ltd., Melbourne and Sydney.

ZEAL'S MAGNIFYING CLINICAL THERMOMETERS



with Special Index Guide—
Easy to Read

OUTSTANDING POINTS

IN CONNECTION WITH

ZEAL'S Clinical Thermometers

- 1 THE TIME OF REGISTRATION DEPENDS UPON THE SIZE OF THE BULB. COMPARE THE SIZE OF OUR BULBS WITH THOSE OF OTHER MAKES. ALL ZEAL'S CLINICALS WILL, UNDER NORMAL CONDITIONS, REGISTER IN THE TIME STATED ON THE THERMOMETER.
- 2 THE MAGNIFICATION OF THE MERCURY COLUMN IS ALWAYS PERFECTLY CLEAR, ONLY THE BEST QUALITY GLASS BEING USED.
- 3 EACH THERMOMETER IS TESTED FOR ACCURACY, SHAKING DOWN, AND CONSTRUCTIONAL FAULTS BEFORE LEAVING THE FACTORY.
- 4 AN UNCONDITIONAL CERTIFICATE OF GUARANTEE IS SUPPLIED WITH EACH INSTRUMENT.
- 5 THE WORKMANSHIP IN THE CONSTRUCTION OF THE TUBE, GRADUATING & FIGURING IS UNSURPASSED.

WE MANUFACTURE
ALL TYPES OF THERMOMETERS

REPRESENTATIVES:

Australia: ARTHUR BAILEY

The Banking House, 228 Pitt Street, Sydney.

New Zealand: J. L. GARRARD & SON LTD.

Commercial Travellers' Club Building, Wellington
And at Auckland.

G. H. ZEAL LTD.

Morden Road, Merton, London, S.W.19, England.

Established 1888.

Cables: "Zeal-dom," London

In confidence -

Even in these enlightened days, guidance on methods of family planning can do much to remove anxiety and promote a patient's mental and physical well being. Gynamin entirely fulfils the requirements of a modern contraceptive and may be accepted with confidence.



GYNAMIN

TRADE MARK

The SCIENTIFICALLY balanced contraceptive—in tablet form. Obtainable from your usual Wholesaler.

Take advantage of this
PERMANENT BONUS OFFER

You buy 6, you receive 7

You buy 12, you receive 15

Australian Distributors:—

BRITISH PHARMACEUTICALS PTY LTD
SYDNEY MELBOURNE BRISBANE

Manufactured in England by:

COATES & COOPER LTD.

WEST DRAYTON,

MIDDLESEX

Commonwealth Drug Company PTY. LTD.

Wholesale Druggists • Manufacturing Chemists • Manufacturers' Representatives



50-54 KIPPAX STREET, SYDNEY, N.S.W., AUSTRALIA

Suppliers to Chemists of Drugs and Chemicals, Patent Medicines, Ethical Preparations, and Chemists' Sundry Lines.

Phone



C. D. C. for SERVICE



MA 9761
(6 lines)



"VIC" B.P.C. CREPE BANDAGES

"VIC" B.P.C. CREPE BANDAGES

Are British made, of traditional British quality.
Will not fray or unravel at the edges. Provide necessary support, yet yield to every movement. Healthy and comfortable to wear.
Allow free circulation.
More durable—yet less than one-third the price of rubber and elastic web.
Manufactured in 2 in., 2½ in., 3 in., 3½ in., and 4 in. widths.
Give customer satisfaction and repeat sales.
Build profits and goodwill.

BUY "VIC'S" - SELL "VIC'S"

GROUT & CO. LTD.,
Great Yarmouth, ENGLAND.
Australasian Agents: **GREENHALGH'S PTY. LTD.,**
Sydney, Melbourne and New Zealand.



W. J. Rendell

WISDOM IN FEMININE HYGIENE

FOR OVER FIFTY YEARS
the name Rendell has been associated
with products for feminine hygiene
— fifty years spent in experiment,
clinical and laboratory research.

This wealth of information and unique
experience is reflected in all Rendell
Products, which today set a standard
of excellence unsurpassed for hygiene
and efficiency.

Now available in Packs of 6 and 12 Tablets
Ask your Wholesaler for Bonus Buy of 1 doz. or over

» **RENDELLS** « PESSARIES

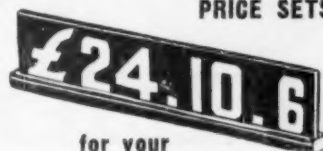
Australia: WARD & WARD (Australia) PTY. LTD., 430 New Canterbury Road, Dulwich Hill, N.S.W.
England: W. J. RENDELL LTD., Hitchin, HERTFORDSHIRE.

3 1/4" PLASTIC Price Stripping Available!

Full range of matching price tickets for Chemists!



Neat and colourful, this new width three-quarter inch Price Stripping with its matching numerals will give your Pharmacy that modern appearance which helps your profit-building merchandising.



PRICE SETS

for your

WINDOWS & DISPLAY CASES

For show-case and window-pricing, the de-luxe P.P.B. set is ideal. It can be set up in seconds and gives that distinctive quality appearance necessary for modern display.

1 1/2-in. characters 38/- set
3/4-in. characters 45/- set

Australia's best value in Price Systems!

This new 3/4 in. stripping is only 40/- per 100 feet, and sets of 36 dozen figures, from 1d. to 10/-, are only 72/- plus tax. Easier to fix, looks better, lasts longer! Samples free on request. Cheques with orders, post free. See the best see P.P.B.



The PLASTIC PRICE TICKET & BEADING CO.

1949-52 MALVERN ROAD., DARLING, S.E.5. VIC.

Phone BL6954

INTERSTATE AND N.Z. AGENTS FOR P.P.B. PRICE TICKET SYSTEMS:

NEW SOUTH WALES: Mears Bros. Pty. Ltd. (Shop Equipment Division), 1st Floor, 96 Phillip St., Sydney.

Phone: BW 3892

QUEENSLAND: Parsons Bros. & Co. Ltd., Elizabeth St., Brisbane. Phone B 3221.

SOUTH AUSTRALIA: Henry Berry & Co. (Aust.) Ltd., Franklin St., Adelaide.

WEST AUSTRALIA: Parsons Bros. & Co. Ltd., Fremantle. E. S. Lazarus & Co. Ltd., Perth.

TASMANIA: J. Walch & Sons Pty. Ltd., Hobart; Amco Agencies, Launceston.

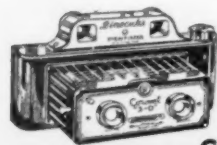
NEW ZEALAND: The Griffin Savage Co., 8-12 Allen Street, Wellington, C.3.



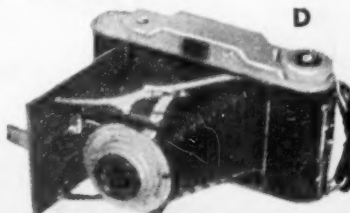
A



B



C



D

Coronet Box Cameras are Here!

Coronet Cameras are famous for their ability to sell themselves (90,000 were sold in England in a year!). Sales have already rocketed in Australia. You are advised to contact H. Bleakley Photographics Pty. Ltd., the Firm with 45 years of practical experience, and find out how you can profit. Coronet Cameras are subject to normal trade discount, and are obtainable from your regular Wholesale House or direct from the Sole Australian Agents.

(A) CORONET FLASHMASTER. — A brand new Camera. Synchronised for the Coro Flash Gun (25/-). Also takes ordinary daylight snaps of outstanding clarity. Retail price, only 44/6.

(B) CORONET AMBASSADOR. — Takes eight pictures on standard 120 film. Time and Instantaneous shutter. Retail price, 44/6.

(C) CORONET 3-D. — An improved version of an already established best-seller. Takes 4 stereo pairs or 8 standard size pictures on 127 film. Compact 3-D Viewer included. 62/6.

(D) CORONET RAPIDE. — Folding Camera. Eight exposures on 120 film. Eye level viewfinder. Time and instantaneous. 99/6.

H. BLEAKLEY PHOTOGRAPHICS PTY. LTD.

HEAD OFFICE: 397-399 KENT STREET, SYDNEY. BX 5761 323 Bourke St., Melbourne Cent. 1255, 2010.

1987. 621 Wickham St., The Valley, Brisbane. 'Phone L 4646. 19 Pier St., Perth. 'Phone BA 3473.

20 YEARS PROGRESS

Gives confidence in

TODAYS TESTED FORMULA

CONCENTRATION		Sperm-motilities	
		CONTROL	EXPERIMENTAL
S	Before dilution	3	0
	After dilution	2+	0
$\frac{S}{2}$	Before dilution	3	0
	After dilution	3	0
$\frac{S}{4}$	Before dilution	3	1
	After dilution	2+	1+
$\frac{S}{8}$	Before dilution	3	2
	After dilution	3	2
$\frac{S}{16}$	Before dilution	3	2
	After dilution	3	1+

TESTS HAVE PROVED
CONCLUSIVELY THAT
UNDER NORMAL CONDITIONS
ALL SPERMATOZOA ARE
KILLED BY APPROXIMATELY
ONE-THIRD
OF A NORMAL APPLICATION

KAREEN

KAREEN

Is a thoroughly reliable and tested product with a "High Profit" margin.
worthy of your fullest confidence and support.

For parcel details consult your local agents

MELBOURNE—
WALLIS BIOLOGICAL SUPPLIES
SYDNEY and BRISBANE—
MUIR & NEIL Pty. Ltd.
NEW ZEALAND—
MUIR & NEIL Pty. Ltd., AUCKLAND

ADELAIDE—O. V. ISAACS
LAUNCESTON and HOBART—
L. FAIRTHORNE & SONS Pty. Ltd.
PERTH—A. C. GUHL & CO.

A PRODUCT OF THE U-TEX MANUFACTURING CO., TENNYSON STREET, ELWOOD, S.3

ESTABLISHED 1793.

ATKINSON & BARKER'S
INFANTS'
CORRECTIVE CORDIAL

★
THE INFANTS' MEDICINE
OF 150 YEARS' STANDING

★
FOR TEETHING AND
DIGESTIVE TROUBLES

★
Manufacturers:
ROBERT BARKER & SON LTD.
13 Alistair Street, Manchester 1, England

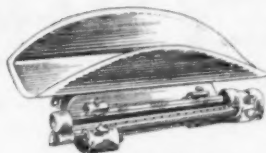


**LEVENSON SCALE CO.
PTY. LTD.**

226 PITT STREET, SYDNEY
Tel.: BM 2525-4-7. Telegrams:
"Leveradich," Sydney.
Proprietors of "The Bousche
Scale Co."
The Peerless Weighing Machine
Co. of Victoria.

**WEIGHING
- SCALES -**

FOR SALE
from £45
FOR HIRE
5/- & 7/6 Weekly
or Scales supplied
FREE
on Share Basis



BABY SCALES

LATEST MODEL "SECA"
(32 lbs. capacity)
£13/19/6

**PRESCRIPTION TO
improve
GOOD MEDICINE**



Good medicine can be made to look better if dispensed in an attractive modern bottle, for glass is the visible guarantee of the quality of the draught it contains. Also, good appearance is an important psychological factor in aiding the work the medicine is called upon to do. That is why it pays to dispense your medicine in these handsome Agee bottles. Complete with hygienic screw caps of bakelite, Agee bottles are available in the most convenient shapes and in all sizes.



Agee **BOTTLES**

**AUSTRALIAN GLASS
MANUFACTURERS CO. PTY. LTD.**
428 SPENCER STREET, MELBOURNE. Phone: FJ 6101

Now in **TWO** designs

Greg-Steel Spatulas

Blade Sizes:
3½ in.-12 in. long



MIX Ointments and make Pills quicker with either of these strong, flexible Spatulas, manufactured from finest Carbon and Stainless Steel. Firm grip handles.

Special ointment Spatulas—3 in., 4 in. and 5 in. blade.
Pill Spatulas—5 in. blade.

Made in Australia by
GREGORY STEEL PRODUCTS PTY. LTD.

25 JOHNSTON STREET, COLLINGWOOD.

Supplies obtainable from all leading Druggist Supply Houses.



*Special
scientifically balanced*

VAGINAL ANTISEPTIC TABLETS

DEODORANT — PROPHYLACTIC

*for effective
intimate feminine hygiene*

Packed in tubes of 12 tablets

Wholesale price 42/- per dozen tubes, plus tax

Reliably known to Australian market for 25 years

OBTAINABLE FROM ALL WHOLESALERS

G. ARNOLD & CO. PTY. LTD.

SYDNEY

PLANNED PARENTHOOD

When you are asked for guidance as to means of planning parenthood, you may recommend **PROVEEN** Tablets or Jelly with complete confidence.

These products are recommended by the Racial Hygiene Association of Australia in all cases where family planning is a medical necessity.

A "Chemist Only" Product

Order your stocks now and gain the advantage of the generous bonus buy.

PROVEEN PRICES:

Proveen, Complete (with transparent self-measuring applicator)	..	..	69/- per doz.	RETAIL, 10/-
BONUS, 2 Refills.	..	..
Proveen Refills	..	..	56/- per doz.	RETAIL, 8/-
BONUS, 2 Refills.	..	..
Proveen Tablets	..	..	42/- per doz.	RETAIL, 6/-
PACK, 14 to the dozen.	..	..

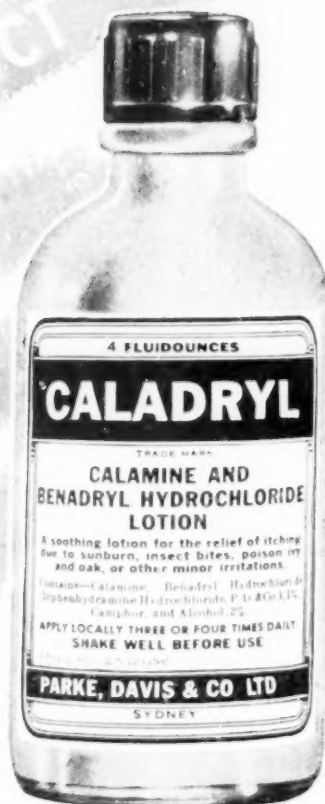
Stocks obtainable from all Wholesalers

Manufactured for 20 years by D.H.A. (N.S.W.) PTY. LTD., for

DE VANTA CHEMICAL CO.

65-67 York Street, Sydney, N.S.W.

Makes Summer Sales Soar



CALADRYL

calamine-type antipruritic lotion
with Benadryl

PARKE, DAVIS & CO. LTD., SYDNEY

(INC. U.S.A. LIABILITY LTD.)



SOOTHING to itching, irritated skin, CALADRYL gives quick relief because of its antihistaminic-antipruritic combination—Benadryl with a specially prepared calamine lotion base.

SUMMER is the season when demand increases for relief from itching and irritation — sunburn, prickly heat napkin rash, cosmetic rash, insect bites, hives, contact dermatitis, and minor skin irritations.

SALES of CALADRYL are climbing steadily. Recognition of its value in common skin complaints and appreciation of its outstanding pharmaceutical elegance continue to build demand.

CALADRYL is a smooth, creamy lotion, pleasantly scented. It does not stain, does not rub off, and is easily removed by rinsing. It stays suspended for days and resuspends easily on slight shaking.

CALADRYL is supplied in 4-ounce bottles, wide-mouthed for easy application.



WHEN FUNGUS IS AFOOT . . .

Tineafax' Ointment complies with the twin essentials for effective treatment of "athlete's foot," ringworm of the body, "dhobie itch" and other tinea infections—ability to penetrate skin, and strong but non-irritating antifungal effect. 'Tineafax' contains no mercury. Its fungicidal agents, chief of which is zinc undecylenate, are incorporated in a special ointment base which carries them through the skin to the most deep-seated spores. In the majority of cases the condition will clear in 7 to 21 days. For after-treatment, and prophylaxis in persons exposed to infection, 'Tineafax' Powder should be used. Dusted on to the feet and into socks and shoes, it prevents growth of the fungus.

The Ointment is issued in collapsible tubes of 1½ oz. (approx.); the Powder in sprinkler-top containers of 2 oz. Literature available on request.

The answer is **'TINEAFAX'**

**COMPOUND UNDECYLENATE OINTMENT
AND UNDECYLENATE POWDER**



BURROUGHS WELLCOME & CO. (AUSTRALIA) LTD., SYDNEY, N.S.W.